

**NEW MEXICO  
BUREAU OF LAND MANAGEMENT**



# **ARCHEOLOGICAL INVESTIGATIONS IN WEST-CENTRAL NEW MEXICO**

## **VOLUME 2: HISTORIC CULTURAL RESOURCES**

**Klara Kelley**

**CULTURAL RESOURCES SERIES NO. 4, 1988**



**BUREAU OF LAND MANAGEMENT  
NEW MEXICO STATE OFFICE  
SANTA FE, NEW MEXICO**

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**San Augustine Coal Area**

**Archeological Investigations In  
West-Central New Mexico**

**Volume 2:**

**Historic Cultural  
Resources**

**by**

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Edited by Barbara L. Daniels  
and Marilu Waybourn

**1988**

**Bureau of Land Management  
Las Cruces District  
Socorro Resource Area**



# Acknowledgements

**I**would like to thank the following people for help with this report: Ninibah Cahn and Alfred Dehiya of the Navajo Nation Office of Navajo Land Development, Robert T. Garcia, Tribal Secretary of the Pueblo of Acoma, Delfino Begay, Tribal Secretary of the Pueblo of Laguna, Susan Collins, Director of the Zuni Archeology Program, Robert Atwood, Catron County Clerk, T.J. Ferguson, Tom Williamson, Tom and Eunice Cox, Mr. and Mrs. Lawrence Brown, Eliseo Baca, and Ray Boyett.

Klara Kelley



# Abstract

**D**uring the late prehistoric period, the ancestors of the Zuni and Acoma people occupied the San Augustine Coal Area (SACA) and surrounding region. By Coronado's entry into the Southwest in 1539, Native Americans were not living in the area, but continued to use it during the 17th, 18th, and early 19th centuries. The SACA was apparently a buffer zone where Chiricahua Apaches, Zunis, Navajos, and Acomas hunted and gathered and, with Lagunas and Hopis, collected salt at Zuni Salt Lake. Lagunas, Navajos, Acomas, and Zunis still make pilgrimages to Zuni Salt Lake, gather medicinal plants and clays, hunt, and pick piñon nuts.

The area was largely unknown to non-Indians until the 1850s, when the United States Army sent expeditions to control Apaches and Navajos after taking the New Mexico Territory from Mexico in 1846. Navajos, fleeing from U.S. Army onslaught farther north, were living in the area by the 1860s. By the 1880s the Army had driven both groups out.

Native American cultural resources known or expected in SACA include natural landmarks; places for gathering plants or minerals; shrines and offering points; cross-regional roads; sites for hunting eagles, deer, and antelope; piñon-nut gathering camps; and miscellaneous campsites, homesites, and graves. The Native American beliefs about sites and places in the SACA show a fusion of tribal histories and religions. The land also provides geographic reference points for episodes of tribal history and mythology.

Non-Indian settlement of SACA began in the late 1860s, when Hispanic stock owners moved in as the U.S. Army drove Indians from the area. The settlers came in groups; each group consisting of a large-scale sheep owner and his extended family, people who ran sheep on shares with the owner, and hired herders.

The railroad came to New Mexico and Arizona between 1878 and 1881 and brought the territories within days rather than weeks of national markets for cattle, sheep, and wool. Speculators in land and cattle rushed into the SACA and surrounding region, manipulating homestead laws to control water sources and huge tracts of waterless range.

A few bona fide homesteaders also arrived, but most were driven out or killed by the speculators' hired thugs. Speculators also filed homestead entries on land that Hispanics already occupied, often displacing them. In the late 1880s, cattle prices fell and speculators left. Their successors included sheep ranchers and Hispanic families from the north.

The cattle speculators returned in 1908, but the movement of settlers into SACA was gradual until 1917. After Congress passed the Stock Raising Homestead Act late in 1916, a flood of homesteaders moved in from Texas and Oklahoma. Many were tenant farmers whose landlords decided to raise livestock instead of crops to take advantage of high World War I meat and wool prices. Members of an extended family might claim several neighboring homesteads and operate them and neighboring waterless public domain as a unit. As more and more land was withdrawn from the public domain, large ranchers were forced to lease land acquired by railroads and the State of New Mexico. The ranchers hated the homesteaders for fencing the open range and for forcing them to lease land. Violence erupted between the homesteaders and cowboys working for the large ranchers.

After World War I, demand for livestock fell and the Federal War Finance Office touched off the Livestock Panic when it called in wartime loans that ranchers had secured with cattle. To pay off the loans, the ranchers all dumped their cattle on the market at once, lowering prices

so much that many stock owners went bankrupt and many homesteaders moved away.

The Great Depression pushed another wave of homesteaders from Texas and Oklahoma into SACA. Unlike their World War I predecessors, they were mainly dry land farmers. Due to settlement of the land there was little open range available. With World War II many of them, including the earlier Hispano and Anglo small landholders, moved on to Arizona and California to work in wartime industries. The small landowners who stayed bought up the holdings of those who left and turned to stock raising. Their descendants remain the primary users of the area today.

Site types include dwelling sites (headquarters of large ranches, headquarters of small ranches, homesteads, and line camps); camps and range-use sites; watering places (windmills, dams, hand-dug wells, and improved springs); roads and trails; public and community sites (stores, post offices, dance halls, schoolhouses, churches, canteens, stage stations); cemeteries and graves; and miscellaneous types (such as section-corner markers, oil drilling sites, and petroglyphs). The survey sample is described in terms of general site characteristics (site types, feature types, room construction), spatial distribution

of site components, and distribution of site components through time.

Each site is described as it appears archeologically and its history described according to interviews and documents. Patterning in the sample of historical sites from the survey is also described and compared with patterning in previously identified sites (Native American, Hispanic, and Anglo). With only 19 sites (29 components), the sample is too small for these patterns to be projected onto SACA as a whole.

Archeological and ethnohistorical information on specific sites in SACA shows that a large proportion of sites were reused. The comparison of archeological and ethnohistorical data on particular sites shows that many features are difficult to identify after years of abandonment, salvage, and erosion. These processes of site formation clearly require archeologists to make the feature, rather than the site, the unit of field observation. Field methods were developed and tested for consistent recordation of features on historic sites. The Martin homestead, a 1930s homestead south of Fence Lake, was selected to test the field methodology. Recording methods and results, together with ethnohistorical data, are discussed.

# Contents

<b>Acknowledgements .....</b>	<b>iii</b>
<b>Abstract .....</b>	<b>iv</b>
<b>Chapter 1 — Sources of Information .....</b>	<b>1-1</b>
Published Works, Official Reports, Manuscripts, Previous Archeological Surveys .....	1-1
Archival and Related Materials.....	1-1
Consultation with Tribal Officials.....	1-3
Interviews with Individuals .....	1-3
The San Augustine Coal Area Survey .....	1-3
<b>Chapter 2 — An Overview of the Native American Cultural Resources .....</b>	<b>2-1</b>
Chronical of the Native American Occupation .....	2-1
1539-1846: Spanish and Mexican Colonial Period .....	2-1
1846-1868: Early American Period .....	2-3
Post-1868: Later American Periods .....	2-4
Known Native American Cultural Resources .....	2-4
Sites Recorded by Previous Archeological Surveys.....	2-4
Cultural Resources Indicated by Other Sources .....	2-6
Probable Types of Native American Cultural Resources Not Yet Discovered .....	2-11
Natural Landmarks .....	2-11
Plant-Gathering Locations .....	2-11
Mineral-Gathering Locations .....	2-11
Shrines and Offering Points.....	2-11
Cross-Regional "Roads" .....	2-12
Eagle-Hunting Sites.....	2-12
Deer-Hunting Sites.....	2-12
Antelope Hunting Sites.....	2-12
Piñon-Nut Gathering Camps.....	2-13
Miscellaneous Campsites.....	2-13
Homesites .....	2-13
Graves.....	2-13
Other Resource Types.....	2-13
The Importance of Native American Cultural Resources .....	2-13
<b>Chapter 3 — An Overview of the Hispanic and Anglo Cultural Resources .....</b>	<b>3-1</b>
A Chronicle of the Hispanic and Anglo Occupation.....	3-1
1868-1907: Early Non-Indian Settlement.....	3-1
1908-1916: The First Resident Big Cattle Outfit .....	3-7
1917-1930: World War I and Its Effects .....	3-15
1930-1942: The Great Depression .....	3-21
1942-Present: The Development of Modern Ranches.....	3-29
Known Hispanic and Anglo Cultural Resources.....	3-30
Cultural Resources Recorded by Previous Archeological Projects.....	3-31
Cultural Resources Indicated by Documents and Maps .....	3-38
Cultural Resources Indicated by Interviews .....	3-39
Probable Types of Hispanic and Anglo Cultural Resources Not Yet Discovered.....	3-48
Dwelling Sites.....	3-48



## Contents (Continued)

Camps and Range-Use Sites.....	3-48
Watering Places.....	3-49
Roads and Trails.....	3-49
Public and Community Sites.....	3-49
Cemeteries and Graves.....	3-49
Miscellaneous Sites.....	3-49
The Importance of Hispanic and Anglo Cultural Resources.....	3-50
<b>Chapter 4 — Historic Sites in the San Augustine Coal Area.....</b>	<b>4-1</b>
Methodology.....	4-1
Architecture.....	4-1
Artifacts.....	4-2
Historic Site Descriptions.....	4-2
Site 242.....	4-2
Site 256.....	4-3
Site 259.....	4-4
Site 269.....	4-4
Site 271.....	4-5
Site 282.....	4-7
Site 315.....	4-7
Site 320.....	4-7
Site 321.....	4-8
Site 323.....	4-3
Site 331.....	4-10
Site 465.....	4-10
Site 466.....	4-11
Site 482.....	4-11
Site 484.....	4-11
Site 485.....	4-14
Site 497.....	4-15
Site 498.....	4-17
Site 500.....	4-17
Analysis of the Historic Site Component Sample.....	4-19
General Site Characteristics.....	4-19
Spatial Distribution/Site Components.....	4-19
Distribution of Site Components Through Time.....	4-21
Comparison of Ethnographic and Archeological Data.....	4-23
Integration of Data from SACA Survey and Other Sources.....	4-26
Site Types.....	4-26
Feature Types.....	4-26
Room Construction.....	4-27
Spatial Distributions of Site Components.....	4-27
Distribution of Site Components Through Time.....	4-29
A Methodological Experiment: The Martin Homesite.....	4-29
Field Recording and Analysis.....	4-29
Results.....	4-34
Summary of Site's History.....	4-38
Conclusions: Methodological Recommendations.....	4-38
<b>Bibliography.....</b>	<b>B-1</b>

## List of Figures

Figure 2.1: Some Native American cultural resources in the SACA.....	2-5
Figure 3.1: Settlement in the Homesteading Study Area, 1882-1886 .....	3-5
Figure 3.2: Nations, Garcia and Hubbell landholdings ca. 1910-1915.....	3-9
Figure 3.3: Homesteads in Homesteading Study Area, 1888-1916.....	3-11
Figure 3.4: State land selections in the Homesteading Study Area, 1916-1922 .....	3-13
Figure 3.5: Nations, Garcia and Hubbell landholdings, early 1920s.....	3-14
Figure 3.6: Homesteads in the Homesteading Study Area, 1917-1922.....	3-19
Figure 3.7: Homesteads in the Homesteading Study Area, 1923-1929.....	3-22
Figure 3.8: Homesteads in the Homesteading Study Area, 1930-1934.....	3-24
Figure 3.9: Land ownership in the Homesteading Study Area, ca. 1940.....	3-27
Figure 3.10: Hubbell lands and state lands most likely to be leased, ca. 1940 .....	3-28
Figure 4.1: Whitley-Black house at Site 271 .....	4-5
Figure 4.2: Well frame and hewn log stock trough at Site 320 .....	4-8
Figure 4.3: The "Killen School" building at Site 323 .....	4-9
Figure 4.4: LA 48066 (Field No. 482), historic brush corral and possible hearth .....	4-12
Figure 4.5: LA 48068 (Field No. 484), 1930s homesite .....	4-13
Figure 4.6: LA 48080 (Field No. 497), Joe Killen homestead.....	4-16
Figure 4.7: The Wooten house at Site 500 .....	4-18
Figure 4.8: Recording for artifacts other than glass and metal.....	4-30
Figure 4.9: Glass artifact recording form .....	4-31
Figure 4.10: Metal artifact recording form .....	4-32
Figure 4.11: The Martin homesite .....	4-35
Figure 4.12: Checklist of functional types of artifacts present in assemblages .....	4-40

## List of Tables

Table 1.1:	Previously Recorded Site Components in the SACA.....	1-6
Table 3.1:	Settlers on Original Survey Plats, Homesteading Study Area .....	3-3
Table 3.2:	Homesteading in the Homesteading Study Area by Entry Status .....	3-17
Table 3.3:	Homesteading in the Homesteading Study Area by Ethnicity .....	3-17
Table 4.1:	Features on Historic Site Components .....	4-20
Table 4.2:	Construction of Structures on Historic Site Components .....	4-20
Table 4.3:	Historic Site Components and Physiography .....	4-20
Table 4.4:	Historic Site Type Versus Environmental Zone.....	4-21
Table 4.5:	Historic Site Type Versus Terrain.....	4-21
Table 4.6:	Historic Site Type Versus Vegetation.....	4-21
Table 4.7:	Historic Feature Types Versus Environmental Zone .....	4-22
Table 4.8:	Historic Feature Types Versus Terrain.....	4-22
Table 4.9:	Historic Feature Type Versus Vegetation .....	4-22
Table 4.10:	Dates of Episodes of Use on Historic Components .....	4-23
Table 4.11:	Ethnographic Data on Historic Site Components.....	4-23
Table 4.12:	Archeological Data on Historic Components .....	4-24
Table 4.13:	Historic Features Recorded Archeologically & Final Proof Testimony ...	4-25
Table 4.14:	Example of Artifact Data Summary for One Feature .....	4-33
Table 4.15:	Dates of Artifacts at Features on Martin Homesite .....	4-36
Table 4.16:	Functional Types of Artifacts at Features on the Martin Homesite .....	4-37



# Sources of Information

**N**ative Americans, Hispanics, and Anglos have occupied the SACA in successive waves during the historic period. Two cultural resource overviews (Berman 1979; Tainter and Gillio 1980) discuss historical resources in a region of which the SACA is part. This report, however, offers a much more detailed picture of the historic period cultural resources known or expected in the SACA and covers all of the project area.

Chapter 1 discusses the sources of information used in the following chapters. Chapters 2 and 3 synthesize information from a number of sources: published works; official reports; unpublished manuscripts; previous archeological surveys; archives; consultations with tribal officials; and a limited program of oral history interviews conducted alongside the San Augustine Coal Area sample survey. Data from the survey itself appear in Chapter 4, which discusses the archeological record at each site in the light of information from the other sources. Chapter 4 ends with a field methodology design for future recording of historic period cultural resources in the SACA.

### **Published Works, Official Reports, Manuscripts, and Previous Archeological Surveys**

The bibliography to this report lists all published works, official reports, and manuscripts consulted, regardless of whether they are cited in the text. All are potentially relevant. They constitute an inventory of pre-existing research on the region's history that should be useful in later stages of cultural resource planning in the SACA. Other information comes

from archeological surveys of various small parcels within the SACA. These surveys are discussed in Volumes 1 and 3, especially with reference to the prehistoric sites they recorded. The historic sites they recorded are discussed below in Chapters 2 and 3.

### **Archival and Related Materials**

These sources include Indian land claims materials, BLM records, county records, and transcripts of taped interviews.

Various tribes maintain unpublished records that concern their own land claims. Other land claims material is published and is discussed here since it complements the archival documents. Materials from the Zuni, Acoma, Laguna, Navajo, and Chiricahua Apache land claims were also reviewed for this report.

The Zuni Archeology Program (ZAP) (n.d.a) has plotted the boundaries of the Zuni Land Claim on USGS 1:250,000 maps. The maps show that SACA falls entirely within the area to which the Pueblo of Zuni claims aboriginal title. The program also has on file maps and reports prepared by expert witnesses and ZAP staff (Eggan 1980; Elam 1980; Ferguson n.d.; Hart n.d., 1980; Jenkins 1980; Minge 1980), as well as statements by individual Zunis and the texts from Congressional subcommittee testimony. Some testimony and documents from these subcommittee hearings have been published (U.S. Senate 1976).

The Pueblo of Acoma (n.d.) maintains a collection of maps showing the boundaries of its land claim. These maps demonstrate that the area to which Acoma claims aboriginal title

falls outside SACA. In places, however, the boundary of the claim is only a few miles east of the eastern edge of SACA. All the other materials on the Acoma claim consulted for this report are published reports by expert witnesses (Ellis 1974b; Minge 1974; Rands 1974) and the published Findings of Fact and Decision of the Indian Claims Commission (Indian Claims Commission n.d. Docket 266).

The Indian Claims Commission Findings of Fact and Decision (Indian Claims Commission n.d. Docket 227) show that the area of aboriginal title claimed by the Pueblo of Laguna does not come anywhere near SACA. The published reports of expert witnesses in the Acoma Land Claim also discuss areas that overlap the Laguna claim; that is, the parts of the Laguna claim nearest the SACA, therefore no other Laguna land claims materials were consulted.

The Navajo Tribe's Office of Navajo Land Development (n.d.) has maps that show the location of the aboriginal title areas claimed by the Navajo Tribe and recognized by the Indian Claims Commission. The SACA lies entirely within the area claimed by the Navajo Tribe and also within the area recognized by the Commission.

Other unpublished materials consulted for this report are descriptions of archeological sites recorded for the Navajo Land Claim in or near SACA (Navajo Tribe 1958-1960). Tree-ring dates for these sites have been published (Stokes and Smiley 1966). Published reports of expert witnesses (Ellis 1974a; Jenkins and Minge 1974; Reeve 1974; Van Valkenburgh 1974) and the Indian Claims Commission (n.d. Docket 229) Findings of Fact and Decisions are pertinent as well.

All the other archival materials used for this report concern Hispanic and Anglo use of SACA. They include transcripts of taped oral histories (Pioneers Foundation, Inc. n.d.), BLM records, and county records. The BLM and county records concern individual landholdings.

The individual landholdings in the SACA since the first homestead entries a hundred years ago were too numerous to be analyzed in the

time allotted; therefore, the area was reduced to the nine whole townships that encompass the quadrats surveyed archeologically during this project: T.2N., R.17-18W.; T.3N., R.16-18W.; and T.4N., R.15-18W. This area covers about half the total acreage of SACA and is hereafter called the Homesteading Study Area.

The BLM records include the Historical Index, the original patents issued on all patented land in the Homesteading Study Area, records of all unproved homestead entries in those townships, and Master Title Plats that show current ownership (USDI, BLM n.d.a, n.d.b, n.d.c, n.d.d). In addition, following the lead of earlier studies (Levine et al. 1980; Wilson 1980), homestead case files in the Serial Patent File, Record Group 49, National Archives (USDI, BLM n.d.e.) were consulted.

Files on homesteads in which the SACA or earlier inventories had recorded homesites and that might have been occupied during the proving-up period were selected. An explanation of "proving up" is necessary here. After a homesteader applied to the federal government and received approval to homestead a particular tract of the public domain, he or she ordinarily was required to "prove up" five years later, by demonstrating that the applicant had continuously occupied the land.

After reviewing the testimony that the homesteader presented in this "Final Proof," the government would issue (or deny) the homesteader a patent for the land. The case file includes all the relevant records, from the original application to the patent.

County records include a plat book from 1940 and deeds and real estate mortgages dating to the period 1921-1978 (Catron County Clerk's Office ca. 1940, 1921-1978). Time was insufficient for inspection of the property records of Socorro County, which encompassed SACA before its western part became Catron County in 1921. Wozniak (1983; personal communication 1984), however, has examined these records for his study of the central part of SACA.

A more thorough scrutiny of these records would probably answer many questions raised in the historical chronicle in Chapter 3.



## Consultation with Tribal Officials

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Seven officials in the Zuni, Acoma, Laguna, and Navajo Tribal governments, including representatives of the two Navajo communities nearest SACA (Ramah and Alamo), were consulted. Chiricahua Apache officials were not consulted, since Chiricahuas no longer constitute a separate tribe in New Mexico. Of all the Apache groups, the Chiricahuas were among the most thoroughly uprooted after the U.S. Army defeated Geronimo in 1886. The Army shipped them to Florida, then to Fort Sill, Oklahoma, where many stayed while others eventually moved to the Mescalero Reservation in southeastern New Mexico (Faulk 1969; U.S. Senate 1932:10438-10442).

The connection of the Chiricahuas with their homeland has been severed for a long time; the undermining of their group structure has undoubtedly hindered them in handing down oral tradition; and the land claims materials, including even Basehart's (1959) careful study of places recalled by Chiricahuas living at Mescalero, failed to record places in or near the SACA.

## Interviews with Individuals

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Time was also too short for a systematic program of interviews with the many people necessary to yield a representative picture of local cultural resources and their importance. The 23 people interviewed do represent all Native American groups except the Apaches that claim land in or near SACA, Hispanics and Anglos whose families have used land in SACA, and people whose families lived in each different part of the Homesteading Study Area.

This group of interviewees may not represent all users adequately because the number of people representing each ethnic group and each part of SACA is so small.

The information obtained from those interviewed for this report did fill many gaps in the local history, identify many cultural resources, and indicate the impressive fund of knowledge and memorabilia (photographs particularly) still present in the vicinity of SACA.

Knowledge and keepsakes are extensions of the sites from which they are drawn and, like the remains on the sites themselves, tell something about those sites. Any assessment of an area's cultural resources should include this knowledge and these keepsakes, even though physical connections with actual sites have been severed.

Because the interviews were private, the text in the next few chapters does not identify the individuals interviewed. The citation "interviews" distinguishes this type of source from the others.

## The San Augustine Coal Area Survey

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Information from all the sources listed above was ultimately collected to aid in understanding the historic sites recorded during the San Augustine Coal Area survey. The general field methods that the survey employed are described at the beginning of this report. A discussion of field-recording techniques used specifically for historic sites appears at the beginning of Chapter 4.





# An Overview of the Native American Cultural Resources

### Chronicle of the Native American Occupation

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Zuni and Acoma oral tradition, at least as filtered through the minds of anthropologists, says that the late prehistoric forebears of both the Zuni and Acoma people may have lived in the vicinity of SACA (Bradbury 1967:23-27; Cushing 1896:342; Ellis 1974b; 18 Indian Claims Commission 154:155, 168). Perhaps sometime in the early sixteenth century, residents of Halona (the present pueblo of Zuni) and six other nearby Zuni villages defeated people of "great towns built around." Some of the survivors of the "round towns" may have moved into the Zuni settlements, while others perhaps moved into the country around the Pueblo of Old Acoma. Acomas at this time had been living at Old Acoma for about 200 hundred years and at many sites to the south, just east of SACA (Ellis 1974b). Purely archeological evidence suggests that Zuni culture of the historic period combines traits from both the prehistoric Puero-Chacoan region to the north and the Mogollon region to the south (Rinaldo 1964).

The Zunis, and undoubtedly the Acomas, took salt from Zuni Salt Lake. Salt from the lake reportedly has been found far to the north in prehistoric ruins of Mesa Verde and the San Juan (Cushing 1896:353). The Zunis later may have used the salt in an extensive trade network for luxury goods that included turquoise, worked buffalo hides from the Great Plains, shells and coral from the California and Gulf coasts, macaw feathers, peridot,

blankets, cloth or cotton, jewelry, wicker baskets, and ceramics (Bandelier 1892:3; Ferguson 1979). Zunis hunted and gathered as far south as Fox Mountain and the Datil Mountains, a region that encompasses SACA (Ferguson 1979; Hart 1980).

### 1539-1846: Spanish and Mexican Colonial Period

The historic period in what is now the State of New Mexico commenced not far north of SACA, when the first Europeans visited the Zunis in 1539. One visitor, the black explorer Estevan, marched boldly with his retinue to the Zuni villages, where the Zunis lured him into a hut and killed him. The more timid Fray Marcos de Niza lagged behind and apparently spied on the settlements from a safe distance, then returned to New Spain with tales about the golden "Seven Cities of Cibola." The routes of these two men apparently passed west of the SACA (Bancroft 1962; Bandelier 1892; Hodge 1907), as did that of Francisco Vasquez Coronado, who conquered Hawikku, one of the Seven Cities, the next year (Bancroft 1962; Hodge 1907; Hodge 1937).

Coronado saw salt at Hawikku and learned that it came from a lake a day's journey away (Hodge 1907). Several months later, Coronado left Hawikku for a base on the Rio Grande. Although three divisions of his men followed a route north of SACA (approximately the present path of New Mexico Route 53 to Grants and U.S. Route 66 eastward), Coronado himself may have crossed the SACA. Zuni guides

took him from Hawikku up the Ojo Caliente Valley (north of the SACA) to Cerro Techado (east of the SACA) and on to the Piro villages along the Río Grande north of Socorro (Reed 1942:7). If the Zunis knew such a route, they presumably used it for their own purposes, perhaps to trade with the Piro.

For the next hundred years, Spanish contacts with "Cibola" were sporadic, and travel around SACA apparently nonexistent. Juan de Onate came to Cibola in 1598 and sent a man to visit Zuni Salt Lake. The observer reported that one needed a bar or pickax to dislodge the crystallized salt from the bottom of the shallow lake (Bandelier 1892:83; Bolton 1908:235-236). The Spanish established permanent missions at Zuni around 1640 (Bandelier 1892:101), but continued to avoid SACA. The Pueblo Indians rebelled in 1680 and drove the Spanish out of New Mexico until the reconquest from 1692 to 1696, led by General Diego de Vargas. During the reconquest, Zuni guides took de Vargas from Cibola to the Río Grande along a route similar to the one Coronado had followed. De Vargas turned southward at El Morro, however, and therefore may have passed east of SACA (Reed 1942:7). Other Spanish expeditions crossed the SACA and its vicinity in 1747 and 1754 (Thomas 1932).

The observers in 1754 noted signs of Apaches in the Gallo Mountains south of the present town of Quemado. Spanish chroniclers recorded Apache raids in Hopi, Zuni, and Acoma country as early as the 1640s (Schroeder 1974:79; Thomas 1932). Apache raiders may have crossed the SACA from the country south of the Gallinas and Bear mountains, later generally considered exclusive Chiricahua territory (Basehart 1959:6-7, 90; 22 Indian Claims Commission 533:535-536; Schroeder 1974:79-80).

Neither the Chiricahuas nor any other groups seem to have lived permanently in the SACA during the seventeenth, eighteenth, or early nineteenth centuries. The area seems to have served as a buffer zone where Chiricahuas, Zunis, Navajos, and occasionally Acomas hunted and gathered, and where these groups, including the Lagunas and the Hopis, gathered salt (19 Indian Claims Commission 248:258; 22 Indian Claims Commission

527:529-532, 533-542; Eggan 1980; Elam 1980; Hill 1940). Although they often warred with each other, Zuni Salt Lake was recognized as a sanctuary (Hart n.d.:3; Stevenson 1904:357).

The Navajos and Chiricahuas formed an alliance against the Spanish during the 1770s. When the Spanish co-opted the Navajo leaders and broke the alliance in 1785, they designated the San Jose River north of Old Acoma Pueblo as the boundary between the two (Basehart 1959:27-28; Schroeder 1974:106-107, 166; Thomas 1932:257-272). Whether the Navajos ever recognized this boundary is uncertain, however. A letter from Francisco Cuervo Valdez in 1706 places El Morro within the "Province of Navajo" (Blanchard 1971:9). Moreover, Navajo sites that may date to the eighteenth century were recorded not only south of the San Jose but within SACA itself (see below in this chapter for site descriptions; Navajo Tribe 1958-1960:S-ULC-CZ-B, DD). One of the sites is a campsite; the other has all-weather dwellings. Thus, Navajos may have been living in SACA sporadically as early as the eighteenth century, possibly to find refuge from the raids that the Utes and later the Spanish visited upon them farther north. Moreover, a Navajo antelope hunting corral, unfortunately undated, was recorded southeast of Quemado (Navajo Tribe 1958-1960:S-ULC-CZ-O). According to oral tradition, Navajos were living and farming in the vicinity of the present village of Ramah by about 1840. They had hunted and roamed this area since the eighteenth century (Blanchard 1971:10-11; Kluckhohn 1966:333). By 1839, Navajos were settling in the Datil Mountains southeast of the SACA (19 Indian Claims Commission 154:192).

The SACA and vicinity remained largely unknown country to non-Indians. During the 1820s, fur trappers had themselves outfitted at Zuni Pueblo before they plunged into the wilderness beyond. In 1826, the "mountain man" Bill Williams was interrupted at his trapping north of the Gila River by Apaches who stripped him and left him to die in the desert. He managed to reach Zuni Pueblo, where he found help. A few years later, returning north from the Datil Mountains, he stumbled upon Zuni Salt Lake (Hart n.d.:7).



## 1846-1868: Early American Period

Having taken the New Mexico Territory from Mexico in 1846, the U.S. Government sought to control the Indians, especially the Navajos and Apaches, who also sometimes fought each other. In the 1850s, Navajos reportedly avoided the country south of Acoma because of renewed hostilities with the Apaches, who claimed that area (Basehart 1959:39-40; Schroeder 1974:169). After Apaches raided Zuni in the fall of 1856, an Army detachment with Henry L. Dodge, Agent to the Navajos, and several Navajo and Zuni guides went to patrol the country around Zuni Salt Lake. From their camp at Cedar Spring 30 miles south of Zuni (evidently near the rim of the Zuni Plateau north of the SACA), Dodge hunted deer, blundered into the camp of Apaches planning another raid, and died at their hands. The soldiers did not find his corpse until Apaches tipped them off months later. Dodge's killer had taken his horse and put on his clothes and shoes, thus tricking trackers into thinking that Dodge had walked away from where tracks showed a scuffle (McNitt 1972:286-291; Walker and Shepherd 1964:104). Despite the hostilities, Navajos continued to gather salt from Zuni Salt Lake, as headman Manuelito revealed in 1855 when he protested that terms of the Treaty of Laguna Negra would cut the Navajos off from the lake (Correll 1979 [1]:105).

In September of 1859, Major Oliver L. Shepherd led a scouting expedition along the "old trail from Acoma to the Rito Quemado." The trail ran just east of SACA, then down the Largo through the SACA to Zuni Salt Lake, then north along the Zuni Salt Trail to the pueblo. Shepherd reported heavily used trails from the lake south and west to the Little Colorado River and north to Zuni but there were no signs of Navajos anywhere along his route (Walker and Shepherd 1964:104). Nevertheless, a few months earlier, Navajos fleeing the U.S. Army, which had launched a war against them in 1858, were reported living 60 miles south of Zuni (Schroeder 1974:171). Moreover, according to Navajo oral tradition, a Navajo from the Crownpoint vicinity settled around Cottonwood Spring in the eastern part of the SACA before the 1860s, where a Navajo site that might date to this period was recorded

(see site descriptions below). If they had not already done so, the so-called Alamo band of Navajos may have settled at this time north of the Magdalena Mountains (50 miles east of SACA) in what is now the southeasternmost of the Navajo reservations. Before that, the country marked the northern extent of the Chiricahuas, with whom the Alamo Navajos intermarried (Basehart 1959:90-91; Van Valkenburgh 1941:117-118). Navajo, or mixed Navajo, Apache, and Puebloan occupation may date to the Pueblo Revolt period (Ab-bink 1983; Mike Marshall, personal communication 1984).

The suggestion that the Acomas hunted in the vicinity is supported by Shepherd's reference to the Acoma trail as well as by the tradition that Rito Quemado (Burned Creek) owes its name to Indians burning its brushy banks to drive out game (Pearce 1965:128). They may have hunted within the SACA "toward Zuni Salt Lake," even though that country lies outside the area to which Acoma claims aboriginal title (18 Indian Claims Commission 154:155, 173).

By the early 1860s, Navajos had begun to settle in the vicinity of the SACA, and more fled there when the U.S. Army unleashed Kit Carson against them in the final decisive campaign of 1863-1864. Navajos were reported both in the vicinity of SACA near the Rito Quemado and farther south, in the Chiricahua stronghold of the upper San Francisco drainage and the Datil Mountains (Schroeder 1974:172-173, 175, 179).

A large proportion of the Navajo Tribe surrendered in 1864, and the Army marched them several hundred miles east to a reservation at Fort Sumner, New Mexico. For four years they languished there, until the Department of the Interior concluded that the land could never support them and let them return to a reservation in their homeland. Many Navajos never surrendered in the first place, however, and many hid out near the SACA. According to Navajo oral tradition, the headman Manuelito hid with his followers in the Sierra Escondida south of the present town of Quemado, where Navajo sites of roughly that period have been recorded (Navajo Tribe 1958-1960:S-ULC-CZ-G, AA). Navajos from the Ramah country must

have crossed the uplands of SACA to reach their hiding places farther south at Apache Creek, Pie Town, and Springerville (Tsa' Aszi' 1982:85). They also hid with the Chiricahuas as well as with Mescalero Apaches far to the east near Fort Sumner, slipping into the reserve on ration days and then out again with the food (Kluckhohn 1966:334; Tsa' Aszi' 1982).

## Post-1868: Later American Periods

Historical evidence convinced the Indian Claims Commission that, by the end of the Fort Sumner period, the Navajos had pushed the Chiricahuas out of the SACA vicinity. After the Navajos returned to their homeland in 1868, they did not settle in the vicinity of SACA, although presumably they continued to hunt and gather there; the Chiricahuas, however, did not regain use of the region (22 Indian Claims Commission 533:541).

The Commission's findings suggest that nothing kept the Chiricahuas from regaining the area, but in fact the Army seems to have exercised such restraint. With the Navajos more or less under control, the Army turned its full glare on the Apaches, who therefore withdrew from open country like that of the SACA into the rugged mountains to the south.

In 1872, the Army placed the Chiricahuas on their first reservation around Fort Tularosa, about 40 miles south of the present town of Quemado. Three years later, the Army told them to move to the White Mountain Reservation in Arizona. Bands of Chiricahuas resisted several times during the 1870s and 1880s by leaving the reservations and raiding (Basehart 1959:50; Ogle 1940; Opler 1938:361). In 1877, the Apache headman, Victorio, raided into the Navajo country north of Ramah before surrendering at Fort Wingate (Collman 1975:31; Ogle 1940:273).

The Army mounted its final, decisive campaign against the Chiricahuas in 1885-1886, for which it recruited Navajos as scouts, several from Ramah (Collman 1975; Tsa' Aszi' 1982:87; Kluckhohn and Vogt 1955:1036). Companies of soldiers and scouts marched from their base at Fort Wingate southward to old Fort Tularosa, probably by way of the the

SACA, and on to Alma, where the Navajos amused the soldiers by showing them how to take Navajo sweatbaths (Chrisman 1885; French 1927:85-88, 119-121). As mentioned above, when the luckless Chiricahuas surrendered, the Army punished them in proportion to the strength of their resistance by shipping them to a reservation in Florida and later to Fort Sill, Oklahoma. The SACA was now safe for the Hispanic and Anglo ranchers and land speculators who were already eyeing the area.

Indians nevertheless retain a shadowy presence in SACA to this day. Zunis, Navajos, Acomas, and Lagunas continue to make religious pilgrimages to Zuni Salt Lake, gather medicinal plants and clays, hunt, and pick piñon nuts (Tsa' Aszi' 1982:108; interviews).

## Known Native American Cultural Resources

The San Augustine Coal Area survey did not find Native American cultural resources from the historic period in any of the sample quadrats; other sources do mention such historic sites elsewhere in SACA. These sources include previous archeological surveys, the general literature, land claims research, and interviews conducted during this project.

The following section will describe each resource, summarize the lore about it, and indicate, when possible, the importance of the resource to members of particular tribes. Figure 2.1 shows the locations of these resources within the SACA boundary.

### Sites Recorded by Previous Archeological Surveys

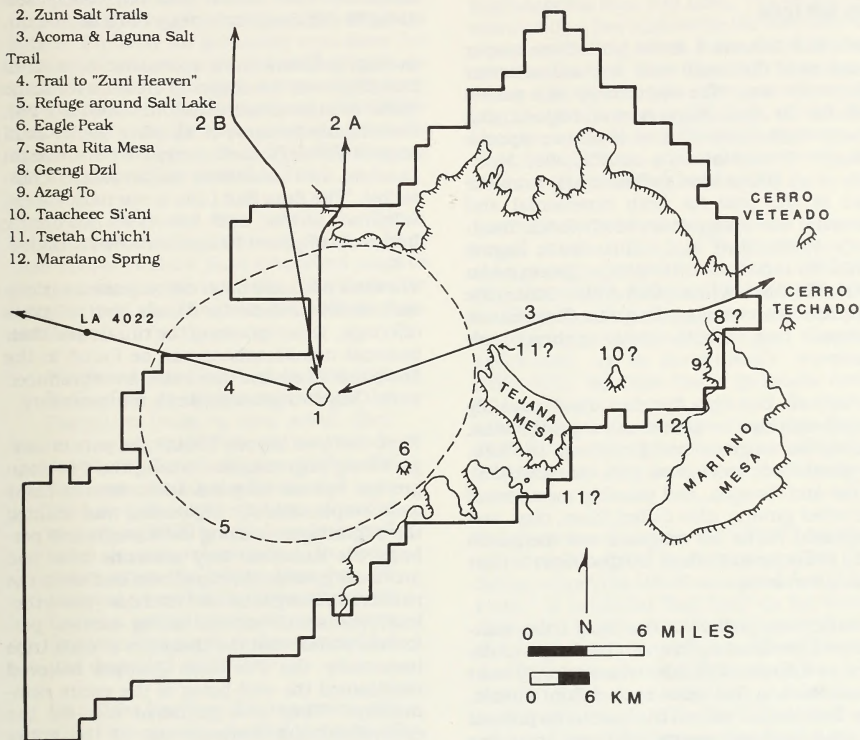
Archeologists have discovered only one historic period Native American site in the SACA through survey: Site 168, BLM Survey Unit 39 (USDI, BLM 1983a). It is a standing sweathouse in Section 8, T.4N., R.16W.

The sweathouse is a common Navajo structure, small and usually cone-shaped. Hot rocks are brought in to heat the sweathouse, where the people sit and sweat. Site 168 has neither dateable associated trash nor a



**LEGEND:**

1. Zuni Salt Lake
2. Zuni Salt Trails
3. Acoma & Laguna Salt Trail
4. Trail to "Zuni Heaven"
5. Refuge around Salt Lake
6. Eagle Peak
7. Santa Rita Mesa
8. Geengi Dzil
9. Azagi To
10. Taacheec Si'ani
11. Tsetah Ch'ich'i
12. Maralano Spring



**Figure 2.1: Some Native American cultural resources in the San Augustine Coal Area.**

homesite or base camp nearby. Navajo deer hunters who have frequented the uplands of SACA for many years (interviews) may have built it.

Taking a sweatbath is a minor domestic ritual and is also part of the rituals that surround deer hunting (Franciscan Fathers 1910:475-476; Hill 1938:117-120, 143-145; Kluckhohn et al. 1971:317-329; Jett and Spencer 1981:193-197; Kelley 1982c:150-151). Some Navajos, at least older ones, still observe some hunting rituals today (Luckert 1975; Tsa' Aszi' 1982).

Many Navajos also consider sweathouses forever sacred or "taboo" once they have been used for any purpose, because they somehow have become permeated with the essence of the bathers, especially the evil that the sweatbath draws from the body (Carroll 1982:9-10, 41; Cleeland and Doyel 1982:240; Holt 1981:48). The wide range of places where anthropologists have recorded these beliefs suggests that the beliefs are widespread. They may also be old, for sweathouses appear on early Navajo sites, dating to the seventeenth century (Dittert et al. 1961:249; Keur 1944; Vivian 1960:165-168).



## Cultural Resources Indicated by Other Sources

### Zuni Salt Lake

Zuni Salt Lake is a maar with three cinder cones near the south end, one with a crater lake of its own. The entire maar is a sacred area for the Zuni, Hopi, Acoma, Laguna, and Navajo Indians and for at least two Apache groups: White Mountain and Cibicue. Members of all tribes have gathered salt from the lake in the past for both ceremonial and domestic use (Beaglehole 1937:52-55; Bradbury 1967; Hart n.d.; Hill 1940; Rands 1974:311-313, 336-337; Stevenson 1904:354-361; White 1973:139). Since the lake lies near territory that the Chiricahuas claimed, they, too, probably gathered salt there.

Today, all but the Apaches (and possibly Hopis) continue to gather salt from the lake, mainly for religious use (Bradbury 1967:28; Ferguson n.d.; interviews; U.S. Senate 1976). Zunis and Navajos, and possibly members of the other groups, also collect foam, clay, and medicinal herbs for religious use (Ferguson n.d.; Franciscan Fathers 1910:409-410; Hart n.d.; interviews).

A "major storyteller" of the Zuni tribe summarized the Zuni myth about the origin of the lake as follows. The lake was originally near Black Rock, a few miles east of Zuni Pueblo. The Salt Mother moved the lake to its present location because people "did not treat her right." Then the people began searching for the salt. They made prayer sticks and prayed for forgiveness for failing to keep the precious lake "clean and beautiful." Finally, they took some salt and went home (Zuni People 1972). The other groups have similar stories about the origin of the lake (Hill 1940:6).

Zuni Salt Lake is important in the origin legends of the Zunis and Acomas. The origin legend, of course, is commonly at the core of a people's system of religious beliefs. The Zuni and Acoma origin legends tell how the people moved among various places before they settled at their present villages. The religious authorities of these tribes, who are the caretakers of the respective tribal territories,

make regular pilgrimages to places named in the origin myths, including Zuni Salt Lake (Bradbury 1967:22-23; Hart n.d.; Stevenson 1904:58-60; Zuni Archeology Program n.d.b.).

In fact, scholars have speculated that Zuni Salt Lake was the center of creation for some of the Zuni forebears (Bradbury 1967:23, 25). Presumably because of its place in the Zuni origin mythology, the Governor of Zuni, Edison Laselute, told the House Indian Affairs Committee, "The Zuni Salt Lake is our most sacred religious shrine and has been for many hundreds of years" (U.S. Senate 1976:124).

The Zuni Salt Lake maar encompasses various shrines, other spots for rituals, and religious offerings. Descriptions of the rituals and their material manifestations can be found in the literature cited and need not be reproduced here. Only two general points are necessary.

First, not just anyone could take part in salt-gathering pilgrimages. Among the Puebloan groups, certain religious authorities or clans were responsible for organizing and making the pilgrimages. Among the Navajos and perhaps the Apaches, only someone who had previously gone on an expedition and knew the rituals could organize and lead one. Nevertheless, the small salt-gathering parties performed rituals that the members of each tribe (especially the Puebloan groups) believed maintained the well-being of the entire community. They also gathered salt for the ceremonial and domestic use of the entire community.

Second, the manifestations of the salt-gathering rituals of the various tribes are located both in and near the maar. They include various types of shrines and offertory items (Beaglehole 1937:52-55; Bradbury 1967:22, 27-28; Hill 1940; Rands 1974:311-312, 336-339; Stevenson 1904:354-361; White 1973:139; interviews).

The beliefs about Zuni Salt Lake are probably very old. Governor Laselute's statement quoted above, together with archeological evidence (mentioned in the preceding section) that the prehistoric Anasazi forebears of today's Pueblo Indians used salt from the lake, suggests that the beliefs go back at least

several hundred years among the Puebloan groups. The preceding section also shows that Navajos were visiting the lake before 1855, and presumably held the accompanying religious beliefs. Probably the beliefs are even older, for Navajo religion is suffused with Puebloan traits that anthropologists commonly believe were absorbed by the Navajos when Pueblo Indians sought refuge among them during the Spanish Reconquest of 1692-1696 (Dutton 1975; Hester 1971; Underhill 1956).

The great intensity with which the Zunis believe in the sanctity of the lake is clear from their efforts for more than a hundred years to gain possession of the lake. As Governor Laselute told the House Indian Affairs Subcommittee:

We do not know why, when President Rutherford B. Hayes established by Executive Order a very small Zuni reservation in 1877, he did not include our sacred Zuni Salt Lake. Tribal officials requested that addition and have tried ever since with requests of record as early as 1880 to add those few small acres to our reservation. In those years since the White Man has attempted to exploit the few minerals in our lake, and it is now, as you can see from these pictures, in desolate, defiled and degraded condition.

Our Tribe has very few resources and very little money. During the term of office of former Governor Lewis we were paid \$250,000 for an easement to allow the crossing of our lands with power lines. We took all that money and paid the entire sum, which was the most money we had ever seen, to acquire control over the Salt Lake. As Governor Lewis will explain, we thought at first, that we were gaining the legal title to the lake, only to learn that we were acquiring simply the mineral rights. But acquiring the rights to use the lake and to keep the White Man from desecrating the lake meant so much to us all that we paid that immense amount of money for the mineral rights to the Zuni Salt Lake (U.S. Senate 1976:124-125).

## Zuni Salt Trails

The Zunis used at least two trails on their pilgrimages to Zuni Salt Lake. The earlier trail was strictly a foot trail, while the later one was a pack trail along which Zunis drove the burros that carried back the salt (interviews). Along the routes are shrines where the pilgrims made plume offerings to the Sun Father and Moon Mother (Stevenson 1904:355). These shrines are sacred, and thus would make the trails sacred.

The Zunis evidently no longer travel the entire length of either trail, and the exact locations of large segments of the trails are unknown. Captain Oliver L. Shepherd's description from his 1859 scouting trip mentioned above is too sketchy to be useful (Walker and Shepherd 1964:104), as is Stevenson's later one (1904:355). Mr. Tom Cox, a Quemado rancher, an on-the-ground segment of what he called the pack trail. Mr. Cox's grandfather came to the Salt Lake country in 1909, when the pack trail may have been used in its entirety.

This trail was drawn on the USGS 7.5-minute quadrangle maps at the insistence of Mr. Cox's father, whom the USGS consulted for "ground truth." It is labeled "foot trail" on the Moreno Hill quad. It runs past Moreno Spring through Section 8, T.4N., R. 18W., southwest into Section 7, then south through Sections 18, 19, 30, and 31 of the same township and Sections 6 and 7 of T.3N., R.18W. To the south it connects with a trail shown on the Zuni Salt Lake quad that ends at Zuni Salt Lake. To the north it connects with a trail shown on the Fence Lake SW quad that runs northeast through Moreno Spring and north through Section 5, T.4N., R. 18W. It continues northward to Atarque Lake, where reportedly it is clearly visible.

According to Mr. Cox, the Zunis stopped using the pack trail when they started hauling the salt in wagons. They were using burros in 1890 (Fewkes 1891:45-46), but had switched to wagons by 1920 (Curtis 1970:102).

Mr. Cox also stated that an older trail strictly for foot travel ran west of the pack trail. This foot trail came south over Santa Rita Mesa near Zuni Spring (Section 22, T.5N., R.19W.)



and ran in a perfectly straight line to Zuni Salt Lake. The USGS Moreno Hill quad shows a "pack trail" along approximately this route. It branches from the present NM Route 32 in the SW/4 of the NW/4 of Section 24, T.4N., R.19W. From there it runs northwest through Sections 2, 3, 11 and 14, T.4N., R.19W., and Section 35, T.5N., R.19W., then northward past Old Fort Atarque.

According to Mr. Louie Martinez, whose grandfather homesteaded in this vicinity, this trail is the one that the Zunis used for pack trains. The geologist Herrick, who visited the country in December of 1899, recorded this trail, but not the one that passes Moreno Spring (Herrick 1900: map facing p. 338). The available evidence suggests, then, that the trail past Zuni Spring is the pack trail and that the one past Moreno Spring is the foot trail.

Ray Boyett (1974) mentions "an old prehistoric road" that he followed in 1930 to within 300 yards of one of the corners between Sections 12 and 13, T.5N., R.18W. "This was now used by ranchers to the north and the Zuni and Navajo Indians to bring salt from Salt Lake, 20 miles southwest" (Boyett 1974:19). By this time they all traveled in wagons. This road supposedly connects with the foot trail past Moreno Spring. By "prehistoric," however, Boyett may simply mean "indigenous" (interventions).

Although the Zunis no longer travel the entire length of either trail, they may still visit segments. In any event, the trails retain their sanctity because of the shrines along the way.

### **Acoma and Laguna Salt Trail**

Salt gathering parties from Acoma and Laguna used their own trail to Zuni Salt Lake. They traveled on foot, often with pack burros. The exact route has not been mapped, but those interviewed for this project described it and could locate it on the ground if necessary. The trail runs east and then south of Cerro Veteado, then west down the canyon between Cerro Veteado and Cerro Techado (Horse Camp Canyon). It enters SACA from the east somewhere near the southeast corner of Section 36, T.4N., R.15W., then runs westward through the trees south of Nations Draw in approximately a straight line to the northern tip

of Tejana Mesa, where it makes a beeline to Zuni Salt Lake. Cairns mark the route in places. Also along the way are shrines, small round or oval windbreaks with rock walls about three feet high and openings to the east. These windbreaks may resemble the "her-reduras" recorded along the prehistoric Chacoan roads in the San Juan Basin (Kincaid 1983; Stein 1982). The pilgrims camped at spots within a quarter-mile of the trail, where they had rock windbreaks and fire pits. The northern tip of Tejana Mesa should also have some sort of marker. Finally, a sacred spring is situated somewhere along the trail (Rands 1974:386).

By about 1930, Acoma and Laguna salt-gathering parties sometimes traveled in wagons, evidently crossing SACA on the Hubbell Road. Laguna salt-gathering parties have not used the foot trail for the last 40 years, but pilgrims from Acoma occasionally attempt to follow it, hindered in this effort by boundary fences. Because of their role in the salt pilgrimages, this trail and the sites along it are sacred.

The account of one person interviewed for this study suggests that Ramah Navajos also may have used this route in their pilgrimages to Zuni Salt Lake. The extreme age of the interviewee and the interpreter's unfamiliarity with the area make this conclusion tentative. Mr. Bill Green, a local rancher, supports this suggestion by recalling that during the 1940s Navajos in wagons would often camp at Twin Windmills (SE/4 of SE/4, Section 4, T.3N. R.15W.) on their way down to Nations Draw. Otherwise, they would enter SACA from Techado, a few miles north, where there was also a well and where they could trade horses with a rancher.

### **Trail to "Zuni Heaven"**

A trail runs from Zuni Salt Lake westward to a place near the confluence of the Zuni and Little Colorado rivers that some people call "Zuni Heaven." Presumably this place is where the Zunis originated, according to mythology (Benedict 1935; Bradbury 1967:21-12; Cushing 1896; Hodge 1937; Stevenson 1904; Zuni Archeology Program n.d.b.; Zuni People 1972:65-66). The site is also important in Acoma mythology and is ex-



tremely sacred to both groups (interviews). The trail connecting this site with the lake has shrines along it and is also very sacred. Its exact route has not been located on the ground, but it reportedly runs a straight course between Zuni Salt Lake and "Zuni Heaven." It would therefore cross the western part of SACA (interviews).

The presence of this trail might explain the function of LA 4022, an anomalous site just north of SACA, in Section 7, T.3N., R.20W. During the first of the Tucson Gas and Electric surveys cited in Volume 1, John P. Wilson, after much deliberation, recorded this site as a Navajo hogan. The site consists of a structure that resembles the windbreak-shrines along the Acoma Salt Trail as described above. It seems to be situated almost exactly on a straight line from Zuni Salt Lake to the confluence of the Zuni and Little Colorado rivers (John P. Wilson, personal communication 1984; Wilson 1972; Museum of New Mexico n.d.).

According to Acoma oral tradition, at least, such "straight-line" roads used by runners were common in the past. Portions of the Acoma-Laguna and Zuni salt trails are similarly straight. This straightness, like the small windbreak-shrines, makes these trails resemble the prehistoric Chacoan roads (Kincaid 1983).

Knowledge of this trail may or may not be widespread among the Acomas and Zunis. Even if that knowledge is limited to religious authorities in the two pueblos, the laity believe that the religious authorities are caretakers for the entire population (see discussion on Zuni Salt Lake above; also Cushing 1896:367-373; Stevenson 1904:48-60; White 1973:41-51). Thus, the people of the two pueblos can be intensely concerned in the abstract even with the specific sites about which they know little or nothing.

### **Refuge Around Zuni Salt Lake**

Acoma people believe that the open plain around Zuni Salt Lake is somehow sacred. On entering this area, a person (even a non-Indian) should sense peace and harmony. Hunting is, of course, forbidden. Bounding the area are Santa Rita Mesa on the north, Tejana Mesa

on the east, the uplands around Eagle Peak on the south, and an unspecified landform on the west. The area thus has a radius of about 10 miles. Nothing marks its edge except the landforms just named (interviews).

Zunis may hold similar beliefs. According to Hart (n.d.) and Stevenson (1904:357-358), the Zunis considered the area around the lake "neutral" territory open to all tribes, even those at war with the Zunis. Navajo tradition also accords the lake neutral status (Kluckhohn et al. 1971:62).

The knowledge of this area may or may not be widespread within the various tribes. Even so, its sanctity would make the area of concern to the general population of the pueblos for the reasons previously given.

### **Eagle Peak**

This low peak in the southwestern part of the SACA (Section 23, T.2N. R.18W.), another site sacred to the Zunis, is where they collect clay for ritual use and capture eaglets. At least one reason the Zunis consider the peak sacred is probably because they have used eagle feathers for ritual paraphernalia. Zunis have captured eaglets there recently, but the practice may or may not persist today. An early observer of this practice was Lieutenant A.W. Whipple, who saw many tamed eagles on the rooftops of Zuni Pueblo in 1853. "They are caught on the cliffs when young, and become quite domesticated. People are not willing to part with them" (Whipple 1941:142). Fewkes (1891:6) also noted that Zunis "esteemed" eagle feathers for religious use. Like many Zuni religious practices and the beliefs that accompany them, eagle capture and the belief that Eagle Peak is sacred may date to prehistoric times.

### **Santa Rita Mesa**

This large mesa in T.4N. R.18W., is named in Navajo clan origin myths and is associated with the Nihooabaanii (Gray Streak Ends) Clan. The Navajo name for the landform is, in fact, Nihooaba (Gray Streak). Van Valkenburgh observed two Navajo men from Ramah collecting plants for ritual curing here 40 years ago, and the practice may continue today. Navajos consider the mesa a sacred landmark (Navajo Tribe n.d.; Van Valkenburgh 1941:94,

1974:83); it is also a favorite hunting place, today as in the past. During the 1930s and 1940s Navajos from around Gallup would go there to hunt, jerk the meat, and pack it home on heavily laden burros (interviews).

### **Geengi Dzil**

A low peak with a spring 15 miles north to Quemado in T.4N., R.15W. is another ritual plant-gathering area, at least for Ramah Navajos, and therefore a sacred place (Navajo Tribe n.d.; Van Valkenburgh 1974:83; interviews). "Geengi" is untranslatable, but supposedly refers to some sort of creature that no longer exists in nature.

Climbing to the top is forbidden, and behaving in a disrespectful way at this place will call down supernatural forces that may eventually kill the wrongdoer (interviews). Interviewees did not give the exact location of this landmark on the ground, but could do so if necessary.

### **Azagi To (Throat Spring)**

This spring is located in the vicinity of Sections 22 and 23, T.3N. R.15W. (Navajo Tribe n.d.). It may be the same as "Cottonwood Spring" in Section 22, T.3N. R.15W. (Navajo Tribe n.d.). According to Navajo oral tradition, the spring is named for a man from the Crownpoint vicinity who had been shot in the throat by Utes, and he had to hold his finger over the healed wound when he spoke. He lived in the general vicinity of the spring before Fort Sumner, and used the spring (Navajo Tribe 1958-60; S-ULC-CZ-Z; interviews). Ramah Navajos consider the site sacred, because the Holy People made it before humans were created (interviews).

### **Taacheeh Si'ani (Standing Sweathouse)**

A mountain shaped like a sweathouse is in the vicinity of Zuni Salt Lake, possibly between Azagi To and the lake. The site is a landmark to Ramah Navajos (interviews). Its exact location has not been pinpointed, but one interviewee could show its location on the ground if necessary. It may be Mesa Tinaja. It is considered sacred for the same reason as Azagi To.

### **Tsetah Ch'ich'i (Airflow through the Rocks)**

This narrow rock gap is also in the vicinity of Zuni Salt Lake, perhaps west of Taacheeh Si'ani. Like Taacheeh Si'ani, it has not been

located on the ground. It might be El Porticito on the west side of Tejana Mesa, or it might be the notch between Tejana Mesa and its northern point.

### **Navajo Salt Trails**

As previously mentioned in the entry on the Acoma-Laguna Salt Trail, Ramah Navajos may make pilgrimages to the lake along roughly the same route. Geengi To, Azagi To, Taacheeh Si'ani, and Tsetah Ch'ich'i may be landmarks on or near this route. If so, they may also be ritual offering points. Another foot trail from Ramah to Zuni Salt Lake passes a mountain north of the lake called Dibe Jeeh (possible translations: Sheep Bed Ground or Through the Sheep's Ear). Like the sites listed above, this landmark has not been located on the ground, but one interviewee could locate it if taken to the area. This trail might be the old road down Puertecito Draw (Section 34, T.5N., R.16W.) just west of Cerro Blanco (see Chapter 3). Navajos consider the trails sacred because of their use and because of the offering points located along the way.

### **Cluster of Navajo Homesites near "Throat Spring"**

The Navajo land claim researchers located three Navajo sites near Azagi To or "Goat Spring" in the middle of T.3N., R.15W. (Navajo Tribe n.d.). All three sites might date to the time of Azagi. One of these sites probably includes a forked-stick hogan that Mr. Clark Barton, a local rancher, saw near Cottonwood Spring.

(1) Site S-ULC-CZ-Z, about an eighth of a mile northwest(?) of the spring in Section 3(23?), T.3 N. R.15W., consists of two small, crudely-made, cribbed-log hogans (Navajo all-weather dwellings), four windbreaks, one sweathouse, and one corral. The most recent tree-ring dates from the individual structures are 1718+inc (Hogan 2), 1771+inc (Windbreak 1), and 1834+ (Windbreak 5). Artifacts include lithic items (a grooved ax, possibly Anasazi, two projectile points, and one chopper); Anasazi potsherds; and Navajo potsherds of Piñon Utility Ware (post-1800).

(2) Site S-ULC-CZ-B, southwest of Throat Spring in the northern half of Section 22, T.3N., R.15W., consists of three small forked-



stick hogans and two windbreaks. The most recent tree-ring dates from each structure are 1558±inc (Hogan 1), 1478±inc (Hogan 2), 1553±inc (Hogan 4), and 1535± (Shelter 3). Lithic artifacts include a small pounder and a polishing stone.

Ceramics consist of prehistoric Anasazi sherds and sherds of "Quemado Utility" Ware, a poorly understood ware that may be of Navajo manufacture and seems to be associated consistently with "early" (pre-1800?) hogans (Navajo Tribe n.d.; David M. Brugge, personal communication 1984).

(3) Site S-ULC-CZ-C, about a quarter of a mile southwest of S-ULC-CZ-A in the northeast quarter of Section 21, T.3N. R.15W. consists of a small, crudely made forked-stick hogan, a corral, a lean-to, and a windbreak. The most recent tree-ring dates from the individual structures are 1764±inc (Hogan, from which another specimen dated 1653±incG), 1726±incG (Windbreak), and 1447± (Lean-to). No lithic artifacts or historic period ceramics were recorded, although Anasazi potsherds were present.

A more extensive interview program than was possible for this research is necessary to determine the importance of these three sites to Navajos. Many Navajos believe that homesites in general are in some sense sacred, since hogans are very likely to have been consecrated through a Blessingway ceremony (Clelland and Doyel 1982:240, 248).

#### **Navajo Campsite near Mariano Spring**

Site S-ULC-CZ-DD, north of Mariano Spring in Section 32, T.3N. R.15W., consists of two sweathouses, a shelter, and a sherd area. No tree-ring specimens were taken. Artifacts include an obsidian scraper, Anasazi potsherds, and sherds of the historic Quemado Utility (pre-1800?) and Piñon Utility (post-1800) wares.

Like the sites around "Throat Spring," this particular site was not identified by any of the few Navajos interviewed. In my experience, many Navajos feel that one should not disturb a campsite or any other type of site without permission of the former users (Clelland and Doyel 1982:239, 247-248).

## **Probable Types of Native American Cultural Resources Not Yet Discovered**

The general history of SACA and the surrounding region, together with the inventory of known Native American cultural resources, suggests a range of types of resources that might exist within SACA, although some have not yet been discovered.

### **Natural Landmarks**

Landmarks inside SACA, in addition to Zuni Salt Lake and the others mentioned above, may have religious significance to Native Americans. Data on such sites for the various tribal land claims usually came from only a small number of old people. For example, the Zuni data came from twelve old men. Interviews with larger samples might reveal more sites. Natural landmarks of religious significance may or may not be marked by cultural manifestations such as cairns and shrines.

### **Plant-Gathering Locations**

The Zunis and Navajos are the tribes most likely to have specific places in SACA for gathering plants for use in traditional curing and other religious ceremonies. Like the natural landmarks, these locations may lack physical evidence of religious or any other human use.

### **Mineral-Gathering Locations**

The Zunis and Navajos are also the tribes most likely to have specific places for gathering clays and other minerals for traditional curing and other religious uses. Physical evidence of human use may be limited to evidence of the extraction of the minerals themselves.

### **Shrines and Offering Points**

Sites of this type in SACA are most likely to be Zuni or Navajo, although some may be associated with the other groups. Descriptions of this type of site in general are cited or given in the preceding section as well as various other sources (Carroll 1982:41, 51-54; Ellis 1974b:139, 156; Fewkes 1891:7-12; Jett and Spencer 1981:197-198, 202; Kluckhohn and



Leighton 1947:142; Stevenson 1904:354-361; Van Valkenburgh 1974; White 1973:126-132). Some Navajo curing rituals require offerings — often human figurines at Anasazi ruins (Holt 1981:48-50 for a discussion and other references). Ramah Navajos, especially, might use Anasazi ruins in SACA for this purpose.

### Cross-Regional "Roads"

The various Puebloan groups may have crossed the SACA on "straight-line roads" in addition to the trails listed in the preceding section. One possible addition to the list is a trail to Zuni Salt Lake used exclusively by Hopis, although Stevenson's observation (1904:357) that Hopi salt-gatherers came through Zuni, at least on their way back, suggests that they used the Zuni salt trails. The route through Gallup and Zuni that Beaglehole describes also supports this inference (1937:53). Another possible road is the trail by which the Zuni guides took Coronado from Ojo Caliente past Cerro Techado to the Piro pueblos (see above).

### Eagle-Hunting Sites

Zunis and possibly Navajos have hunted eagles in SACA. Members of both groups consider eagle-hunting sites sacred (Carroll 1982:36; Hill 1938:161-166; Zuni Archeology Program n.d.a; interviews), probably because the purpose of the hunt was to get feathers for ritual use. The hunt itself was ritualized and the hunters performed rituals at the traps. Navajo hunters, including those from nearby Ramah, went to the edge of the Navajo country, where they caught eagles by sitting in excavated pits with rabbits tethered on top as bait. Detailed descriptions of the pits, catching techniques, and rituals are in Kluckhohn and others (1971:12-14), Hill (1938:161-166), and the Franciscan Fathers (1910:476-477). Zunis may have used a similar method (interviews), but perhaps more commonly caught eaglets before they could fly and raised them in the pueblo.

### Deer-Hunting Sites

Zunis, Navajos, and Acomas have hunted deer in the SACA and continue to do so today. Cerro Techado, just east of SACA, may have

some ritual significance to Ramah Navajo hunters (interviews). Modern hunters stalk with guns and stay in campers or nearby motels, thus leaving little or no evidence of hunting (interviews). Earlier hunters, who used the bow and arrow would have left both campsites and "deer drives."

Navajo and Zuni deer drives are similar. They consist of stacked-brush fences with openings every 100 yards or where deer trails pass through, and pits at the openings into which the deer fall (see descriptions by Franciscan Fathers 1910:475; Hart 1980:12-13; Hill 1938:131-132; Kluckhohn et al. 1971:11-12; and Zuni People 1972:6-8). The associated Navajo campsites, also described by Hill (1938) and the Franciscan Fathers (1910), would have associated sweathouses. Sites associated with deer hunting may be considered sacred, for deer hunting rituals were performed at these sites.

### Antelope Hunting Sites

Zunis and Navajos both hunted antelope in the general vicinity of SACA. Enormous herds were recorded not far east in the Plains of San Augustine (where the Acomas hunted) before the blizzard of 1888 almost wiped them out (Chrisman 1885; A. Cleaveland 1941:24). Navajo and Zuni antelope-hunting corrals were evidently similar.

The typical antelope drive consisted of a corral about 200 meters in diameter, from which two wings extended as far as a mile. The corral and wings were of stacked trees and brush. Drivers forced the antelope between the wings into the catch pen, where waiting hunters slaughtered them. Descriptions of these corrals and associated campsites, techniques, and rituals are given by Bandelier (1970:69, 81-82) for the Zunis and by Hill (1938:145-157), Kluckhohn and others (1971:8-10), and Van Valkenburgh (1956:33-37) for the Navajos. Navajo corrals with two catch pens or more than one pair of wings have also been recorded (Kelley 1982a:244-246; Navajo Tribe 1958-60:S-ULC-UP-R). Sites associated with antelope hunting are considered sacred or "taboo" (Carroll 1982:36; Hill 1938:145-157; Kelley 1982a:244-246) because of the hunting rituals performed there.

## Piñon-Nut Gathering Camps

Navajos and probably Zunis have gathered piñon nuts in SACA (interviews). Navajos still do so (interviews). Navajo pickers now stay in campers, and probably used to stay in tents. In the early twentieth century, however, they built windbreaks or even cribbed-log hogans if the crop was big (see Ellis 1974b:164-181; Jett and Spencer 1981:34-35; Navajo Tribe 1958-60:S-ULC-CZ-GG for descriptions).

The technology for separating nuts from chaff had evolved by the 1930s to include cedar-bough brooms and hail screens in frames (Boyett 1974:23; Kluckhohn et al. 1971:58-59). The importance of abandoned campsites to Navajos, especially any camps with associated sweathouses, is discussed above.

## Miscellaneous Campsites

Zunis, Acomas, Lagunas, Hopis, Navajos, and Apaches may have camped in SACA for any number of other purposes, including travel, raiding, and hiding. Remains of their campsites might still be evident (see Cushing 1974:587-601 for a description of a Zuni camp, which probably would have left only ephemeral remains). The importance of these sites to the local people would probably depend on the tribal affiliation of those who used the site, how long ago, and the purpose for which it was used.

## Homesites

Navajo homesites (sites with all-weather dwellings) might occur in other places in SACA in addition to the two localities mentioned in the preceding section. According to Van Valkenburgh (1974:83), for example, "old Navajo sites" supposedly are situated on the mesas south of Zuni Salt Lake.

Many Navajo homesites in SACA might date to the Fort Sumner period or slightly earlier, when Navajos were hiding out in SACA. For reasons previously discussed, many Navajos would consider these sites sacred. The sites might also have historical importance because of their age and possible association with important Navajo leaders of the period, such as Manuelito.

## Graves

If Navajo homesites exist in SACA, people may have died at some of them. They would have been buried either in a dwelling or shelter, or not far from the homesite. Navajos consider all graves sacred (Clelland and Doyel 1982:247; Carrol 1982:40-41, 59). (See also Franciscan Fathers 1910:453-456; Holt 1982:51; Jett and Spencer 1981:205-207; and Ward 1980 for descriptions of grave types.)

## Other Resource Types

SACA has proven to have more Native American sites than expected before this research began. More such surprises will undoubtedly come to light with additional field work.

## The Importance of Native American Cultural Resources

Each Native American group has used SACA for religious purposes; for example, pilgrimages to Zuni Salt Lake or secular purposes with religious aspects, such as ritualized hunting. Navajos have also lived in SACA, at least for short periods in the nineteenth century, although members of the other groups have not done so during the historic period. Even secular uses like residence have a religious dimension among the Native Americans (see, for example, the discussion of Navajo beliefs about abandoned homesites and sweathouses).

Among the Native American groups, history and religion are fused. This fusion is evident in the following characterization of Zuni religious societies by an elderly Zuni man.

Historic societies or societies that pass on our traditions are set here at Zuni. They tell us which lands belong to us, where we have lived and what we did in the past. These historic societies also heal people and make them feel better. They do religious things. They have divine power (Zuni Archeology Program n.d.b).

This fusion of religious tradition and secular history may have something to do with the reliance on the oral transmission of history through time. Societies, like the Native American ones of concern here, that have not developed their own systems of keeping written records tend to assign the keeping of oral history to what may be the only available specialists in esoteric knowledge--religious practitioners. The system of places to which the tribal history is tied functions as do maps and documents in societies with their own written records.

The beliefs about particular sites and places in the SACA outlined above show the fusion of tribal history and religion and also the importance of geography. The land provides fixed reference points for episodes of tribal history and mythology. Puebloan and Navajo religions are rooted in particular tribal territories. Native Americans and their representatives have repeatedly expressed the fusion of tribal history, religion, and geography (Holmes 1982; U.S. Commission on Civil Rights 1982:46-53, 58-68; USDI, BLM 1983c, 1984; USDI, BLM 1984a).



# An Overview of the Hispanic and Anglo Cultural Resources

## A Chronicle of the Hispanic and Anglo Occupation

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### 1868-1907: Early Non-Indian Settlement

No sooner had the U.S. Army defeated the Navajos than non-Indian settlers began to move into west-central New Mexico and east-central Arizona. The first were Hispanic stock owners, who settled at San Rafael, Tinaja, Concho, and St. Johns between about 1865 and 1871. Many had previously traded with the Navajos and Apaches in the same localities. In general, the settlers seem to have come in groups, each of which consisted of a large-scale sheep owner, the patron, and his extended family, together with people who ran sheep on shares with the patron (*partidarios*), and herders hired by the *partidarios* or the patron himself. In the shares arrangement, the *partidario* cared for the patron's sheep in exchange for shares of the wool and lamb crops (Bradford 1980:6; Greenwood 1973; McGuire 1980:38-39; Peterson 1973; Stebbins 1980:35-36; Tietjen 1969:24, 62; USDA, SCS 1935; Van Valkenburgh 1941:128).

By 1870, people from Tinaja were ranging their sheep between Zuni Pueblo and Zuni Salt Lake (Vogt and Albert 1970:52-53). Probably people from the other nearby settlements also ranged sheep in SACA.

In 1872 or 1873, Hispanic families moved to the very threshold of SACA when Jose Maria Madrid and his relatives settled at Rito

Quemado, about six miles east of present Quemado and just north of Omega. Jose Maria Madrid had enlisted in the U.S. Army at Las Vegas, New Mexico, during the Civil War, and had re-enlisted for the campaigns against the Apaches. During his service, he became interested in Rito Quemado, which has the best springs in the country (interviews). (This is the place name and probably the location mentioned by Captain Oliver L. Shepherd in his 1859 scouting expedition [Walker and Shepherd 1964]). Madrid induced some of his relatives to leave their homes at Rito Colorado, south of the Laguna village of Mesita, and move to Rito Quemado. One of these settlers was Madrid's brother-in-law, Jose Francisco Padilla, who settled at Rito Spring (Secretary of Interior 1885:133; interviews). By 1880, seven families had moved from Rito Quemado to Mangas, including Jose Maria Madrid. Jose Francisco Padilla stayed at Rito Quemado.

Meanwhile, Sol Barth, a freighter who carried mail between Albuquerque and Prescott and was soon to become the political boss of St. Johns, was also hauling salt to Prescott from Zuni Salt Lake. In 1868, Barth and his fellow salt traders suffered what was evidently the normal punishment that the Chiricahuas meted out to trespassers: abandoning them naked in a desert place from which they could find their way to the kindly Zunis and their ministrations of food, clothing, and shelter (Greenwood 1973:356). Perhaps Barth was the entrepreneur who, nine years later, tried to force his Zuni benefactors to pay for their salt (Hart n.d.:14).

Anglo land speculators and cattlemen were not far behind, as the Army restricted the Apaches more and more. Railroad construction between late 1878 and 1881 (Myrick 1970) had suddenly brought New Mexico within days, rather than weeks, of the big livestock and wool markets in the East and Midwest. The Huning brothers, Albuquerque merchants and freighters to Army posts in Arizona, began wintering sheep along the New Mexico-Arizona border near St. Johns (Wentworth 1948:239-240; Winter 1984:10). High cattle prices in the early 1880s made investment in cattle even more attractive (Carlson 1969; Gordon et al. 1974; New Mexico Department of Agriculture 1962:44-45; Westphall 1965:42-43). The result, as one investor in west-central New Mexico ranching observed, was that "During the years between 1882 and 1885 a number of cattlemen had moved their herds, and occasionally their neighbors' herds, from Texas to New Mexico" (French 1927:42).

The lower the operating costs, of course, the higher the profits; therefore, as soon as the Army had driven the Indians from their remote lands, the cattle owners rushed in. Land competition in such areas was minimal, and cattlemen could quickly gain control of the sparsely distributed natural watering places, thereby monopolizing many square miles of surrounding public domain without paying a penny in taxes or fees.

They often did not pay for the few acres of land with water, if, for example, they could induce their employees, business associates, or family members each to apply for a 160-acre homestead under the 1862 Homestead Law. Such fraudulent homestead entries were hard for the General Land Office to detect, because people applied by filing affidavits at the regional or local land offices. No official inspected the land itself. Even the legal requirement that the homesteader should live on the land for five years to receive a patent was easy to thwart, for proof of continuous residence was not required until the end of the five-year period. By that time, the investor behind the fraudulent homestead entry might have "made his pile" and moved his capital elsewhere, or might have encouraged the original homesteader to "relinquish" the homestead, for which another proxy would then immediately

file. Finally, a settler who failed to "prove up" might keep using the land until someone else filed on it. By these means, cattle owners could control water sources without actually gaining title to the land and the ensuing tax liability (Shepard's Citations, Inc. 1968; Westphall 1965:42-45).

Due to its remoteness, west-central New Mexico was a prime target for the cattle speculators. Stories of cattle barons around Datil and the upper Gila abound, as do tales of cowboys who drifted among the big ranches looking for work. Some were outlaws, others sons of small holders (French 1927; A. Cleaveland 1941; N. Cleaveland 1971; Johnston 1983; Pioneers Foundation, Inc. n.d.; Porter 1929; Stevens 1944). By the early 1880s, cattle ranching grew to the point that ranchers both needed and could finance a private railroad spur from Socorro on the Santa Fe Railroad west about 30 miles to Magdalena. Ranchers could no longer drive their cattle across the last several miles to the Santa Fe Railroad because their herds were too large to subsist on the grass left by cattle from the populous area along the nearby Rio Grande. The large volume of cattle shipments induced the Santa Fe to buy the spur. By 1885, western New Mexico ranchers had their livestock driven to and from Magdalena along a stock driveway 5 to 10 miles wide running all the way west to Springerville, Ariz. (along approximately N.M. Route 60), and along a fork southwest at Datil (Johnston 1983:2-5).

The first big cattle outfit in the SACA vicinity was the notorious American Valley Company. It offers a textbook example of the cattle boomers' abuse of public land laws in New Mexico. In the fall of 1880, Captain John P. Casey reconnoitered the valley of Largo Creek south of the present town of Quemado. The next spring he brought in a herd of cattle from Albuquerque, named the area "American Valley," and immediately began to make money on it (Westphall 1965:56, 1973:150).

The area that Casey planned to dominate encompassed about 4,750 square miles in T.8N. through T.2S. and R.10W. through R.21W. (Westphall 1965:56). He formed a strategic "verbal partnership" with the Surveyor General of New Mexico, Henry M. Atkinson, a



member of the infamous "Santa Fe Ring" of public-land officials, territorial legislators, lawyers, and businessmen who used their privileged positions to plunder the New Mexico Territory, chiefly through land speculation. The partners managed to tie up water sources in a block of townships that covered about 1,600 square miles (Westphall 1973:152).

Between March and August of 1882, Casey had townships in the southern part of this block surveyed, a necessary preliminary to the filing of homestead entries on land with water. The law required that whoever requested such surveys pay for them by depositing money with the General Land Office. This deposit would then be credited to payments for land entries (filing fees and so forth). The law required that the settlers live in the townships to be surveyed, but it was ignored for many of Casey's townships (Westphall 1973:150-152).

Surveys in several townships north of the present town of Quemado occurred between August and October of 1882, presumably also at Casey's behest, although various individuals, supposedly settlers in each township, paid for the surveys. Table 3.1 shows data for the Homesteading Study Area (USDI, BLM 1882-1884). Atkinson then gave

Casey plats of the area long before they were approved or filed in the General Land Office in Santa Fe, so that Casey could have a head start in inducing various employees and associates to make homestead and pre-emption entries on lands with water. These entries were in T.1-3N., R.15-18W., and T.1-2 N., R.14W., most of which lie within SACA and include all but the northern strip of townships in the Homesteading Study Area (Westphall 1973:151, 1965:56).

Four people filed homestead entries within the Study Area, all in January of 1883 (USDI, BLM n.d.a). One entry was in a block of American Valley proxies (Westphall 1965:58); the other three were made eight days after the group of American Valley entries that Westphall mentions. Neither the names of the homesteaders nor their relationships to the American Valley Company are recorded. Several facts suggest that these, too, were American Valley entries. All were filed on the same day; the filing date was only eight days after that of the known American Valley proxy entries; all were in townships of interest to the American Valley Company; and two or three were cancelled in the same year as the known American Valley entry (although eight or nine months earlier) after a federal investigation of land fraud.

**Table 3.1: Settlers on Original Survey Plats, Homesteading Study Area**

<b>TN-RW</b>	<b>Sec.</b>	<b>1/4 of 1/4</b>	<b>Name</b>	<b>Date of Survey</b>	<b>Who Paid</b>
2-17	11	SW of SW	Ruins of house	May 1884	George Smith, Jose Ynes Esquibel
2-18	--	--	Lake Armijo is in this township	Sept. 1882	Jose Armijo
3-16	--	--	Nothing	May 1884	Frank Albert, Jose Ynes Esquibel
3-17	--	--	French's Arroyo is in this town- ship	Sept.-Oct. 1882	(illegible) French
3-18	31	SE of NW	Seguro's	Sept.-Oct. 1882	Andres Segura
4-15	7	NE of SE	Patricio's	July 1882	Name not given
4-16	2	SE of NE	Lucero's	Aug.-Sept. 1882	Batiste Lucero
4-17	16	SE or NE of SW	Tafoya's	Sept. 1882	Luis Tafoya
4-18	--	--	Nothing	Sept. 1882	S.A. Sement



Figure 3.1 shows the location of all cultural features on the original survey plats in the Homesteading Study Area and the locations of the four entries. All entries encompass watering places.

Having tied up water sources and the surrounding range, Casey and Atkinson planned to sell their interests to eastern capitalists for a sizeable profit (Westphall 1973:151). Their plans went awry, however, when five American Valley employees were indicted in June 1883 for murdering two legitimate homesteaders in a township (south of SACA) that bordered the American Valley block (French 1927; Westphall 1973:154-159). The accused men were acquitted, but meanwhile the General Land Office dispatched a special agent, H.H. Eddy, to investigate fraudulent land entries throughout the New Mexico Territory, including those in the American Valley block (Secretary of the Interior 1885; Westphall 1973:153).

Eddy found houses but little or no evidence of long-term occupation on most of the American Valley entries, many of which had already been commuted (patented six months after filing date upon receipt of a cash payment) and transferred to John P. Casey. Eddy did not inspect any entries in SACA, but did cover the country in nearby Rito Quemado. There he found that Jose Francisco Padilla had tried to file an entry on land he had occupied since 1872, only to find that Casey had filed on it (Secretary of the Interior 1885:112-119, 120-122, 133). The Secretary of the Interior reported the results of the full investigation to Congress in 1885. The cancellation of three of the four entries in the SACA Homesteading Study Area, including the one known American Valley entry, followed the next year (USDI, BLM n.d.a).

Meanwhile, either the original government surveyors, Special Agent Eddy, or later investigators told the Hispanic families in the American Valley block that they must secure their rights by filing for homesteads on the land on which they were squatting. These government officials spoke through interpreters. In Mangas, the wife of one resident was an Anglo and interpreted accurately, so that the Mangas people were able to follow the

correct procedures to secure their lands. In Rito Quemado, however, the translation was faulty. As a result, the residents lost their land to the American Valley proxy homesteaders and were forced to move. Government agents told the displaced families that they could fight the American Valley Company on the grounds of both their squatters' rights and the demonstrated fraudulence of the American Valley filing affidavits, which required the homesteader to swear that no one else was already living on the land. The people lacked money to pay the necessary lawyer, however, and therefore did not pursue their claims (interviews).

Among those displaced was Jose Francisco Padilla, who followed his relations to Mangas. His entry had evidently prevailed over that of John Casey on the same tract, only to be cancelled sometime between 1885 and 1888 and turned over to John B. Slaughter, who had come to the country in 1882 and had used the same tactics as Casey to gain control of land south of the American Valley block.

In 1886, he became an incorporator of the American Valley Company along with Atkinson (who died not long after) and Thomas B. Catron, the lawyer, state legislator, Santa Fe Ring member, and land speculator pre-eminent. Catron had taken over Casey's interest after the embarrassments of 1883 (Westphall 1965:58, 1973:153-160).

The American Valley Company, however, could not grow into its land base. The company probably abandoned SACA in favor of the wetter range to the south. Devastated by a decade of falling cattle prices after 1884, the company sold 4,000 cattle in 1893 and virtually abandoned the land. In 1899, Charles H. Elmendorf, with whom Catron had replaced the bankrupt Slaughter, saw only a few "Mexican" families as he traveled between Datil and Quemado, then south up the Largo. These families included the Padillas (Westphall 1973:167). They also may have included the hired herders of stockowners who came from as far as Magdalena and even Los Padillas south of Albuquerque and ran sheep as far as Mangas and Quemado in the late 1800s (interviews).

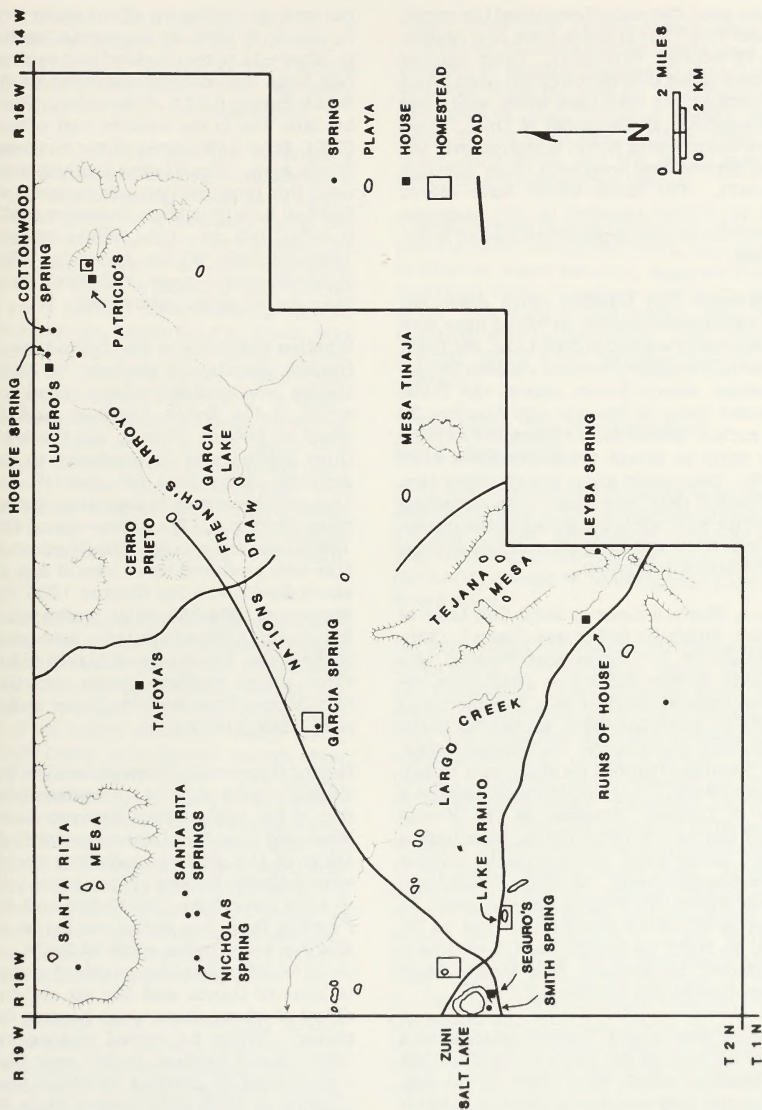


Figure 3.1: Settlement in the Homesteading Study Area, 1882-1886.



The next year, Elmendorf restocked the range, this time with 12,000 sheep from San Angelo, Texas (Westphall 1973:167). Later herding patterns suggest that the company used SACA in the winter, the only time when water was widely available; in December of 1899, "small lakes of storm water [were] scattered over the land in depressions lined with shale" (Herrick 1900:342). The stock would have moved south to higher country in the summer. Whether the company used SACA at all is unrecorded.

If Elmendorf had traveled north down the Largo into the SACA itself, he would have seen more settlers around Zuni Salt Lake. By 1885, the lake had evidently become a haven for cattle rustlers, whose forays against the Zunis succeeded those of Navajos and Apaches 20 years earlier. Zunis even considered forming a war party to attack these parasites (Hart n.d.:15). Four years later, the geologist Herrick reported that "Mexicans" were extracting the salt for sale, spearing pieces of the underwater salt crust and loading them into shallow punts (Herrick 1900:344).

Frank A. Hubbell came to Zuni Salt Lake at this time. Hubbell's father was James L. (Santiago) Hubbell, a "Connecticut Yankee" who had come to New Mexico in 1848 after the Mexican cession, worked as a freighter, and married Julianita Gutierrez, an heiress to the Pajarito land grant in the Rio Grande Valley, where Santiago Hubbell established a ranch. Frank's brother, J. Lorenzo Hubbell, became a trader at Ganado, Arizona, in the Navajo country during the early 1870s, later built a baronial estate there, and eventually became Apache County sheriff. In 1881, Frank Hubbell, too, moved into Apache County, where he clerked at Shuster's Mercantile Store in St. Johns. In 1886, he bought the Y Ranch near Datil (Moyer 1979:64-66; New Mexico State Records Center and Archive n.d.).

Two years later, Frank Hubbell established a store of his own on the shore of the Zuni Salt Lake because people went there to get salt. (One cannot help wondering about a possible connection with Sol Barth, the St. Johns merchant and salt trader of the 1860s, previously mentioned in this chapter.) Hubbell quickly put together a sheep ranch in the country to

the west by buying up all the water holes (interviews). In 1890, by means of a "cash entry," he received a patent for land just south of Zuni Salt Lake that encompassed the fresh water Smith Spring (USDI, BLM n.d.c). The rest of his land was in the western part of the SACA (T.3N. R.19-21W.) west of the Homesteading Study Area. The Huning brothers may have used this range earlier; one wonders whether Hubbell took over Louis Huning's outfit when Huning left in the 1890s (Wentworth 1948:239-240; Winter 1984:10). This was Hubbell's winter range, while the Y Ranch was his summer range (interviews).

Whether Hubbell was also behind the salt-extracting operation is unclear. In 1899, S. A. Rogers, who lived at the lake, called down the wrath of the Zunis, Lagunas, and Acomas when he forbade them to use the lake. The three groups sent "delegations" to him (the Acomas alone sent 60 people), and the Lagunas threatened to back their protest with rifles (Hart n.d.:17). Observers of the early 1900s refer repeatedly to the "Mexicans" at the lake who produced three tons of salt a day at about \$2-\$2.50 a ton (Darton 1905:186-187; Stevenson 1904:354-361). Twelve years later, Saturnino Gutierrez filed on a homestead next to the maar. He was possibly related to Saturnino, whose mother's name was Gutierrez (New Mexico State Records Center and Archive n.d.; USDI, BLM n.d.d).

During this period, Hispanic families from settlements north of SACA were intensifying their use of the low country between Santa Rita Mesa and Zuni Salt Lake, even settling there. Many of the settlers, including people who were probably in-laws of Frank Hubbell, seem to have come from San Rafael and Atarque. Families from San Rafael settled in 1882 at Atarque a few miles north of SACA. One of these founding families consisted of the widow of Lorenzo Garcia and her six children, the oldest of whom, Juan, soon became the local patron. When he moved to Magdalena in 1897, Jean's brother, David, took his place. Frank Hubbell married Trinidad Garcia at Atarque in 1888 (New Mexico State Records Center and Archives n.d.); sources suggest that Juan had a daughter by that name. Another Atarque family originally from San Rafael was that of Edward Provencher, a



French Canadian who had married into a Hispanic family (Tietjen 1969:24; U.S. Department of Commerce, Bureau of the Census 1880: Census of San Rafael, N.M., see especially Families 98, 100, 110; interviews).

Both David O. Garcia and the Provencher family filed homestead entries in the northern part of the Homesteading Study Area in the early 1900s. They were probably using the area even earlier, but only two homestead entries in that part of the Homesteading Study Area antedate 1900: a patent of 1897 (therefore an entry around 1892) covering the Old Santa Rita Springs, issued to Luis Chavez, and an adjacent homestead entry (never "proved up") issued in 1893 to someone whose name is not on record (USDI, BLM n.d.a). A family named Moreno reportedly lived near the spring named after them at the foot of Santa Rita Mesa during the 1890s, but filed no entry there (interviews). These early settlers may well have run sheep on shares with either Juan or David O. Garcia. Edward Provencher filed an entry in the vicinity but not until 1912 (USDI, BLM n.d.d).

Garcia himself bought two patents immediately after they were issued to other homesteaders in 1906, one across Nations Draw from Garcia Spring and the other upstream at Garcia Lake. Presumably, the land at Garcia Spring itself, the site of an earlier American Valley entry, was already taken, even though records show no entry there until 1908. The earlier presence of the American Valley proxy homesteader, ex-soldier Samuel C. Wilson (or someone he represented) could explain why the General Land Office issued a patent only a year after it allowed the entry and yet did not call it a cash entry. The GLO issued the patent to Garcia, to whom Wilson's widow had assigned it (Catron County Clerk's Office 1921-1978; USDI, BLM n.d.c; Wozniak 1983:47).

Hispanic families were also settling farther south in the SACA by the turn of the century. People from Quemado and Mangas, eventually including sons of Jose Francisco Padilla, were taking land down the Largo along the west side of Tejana Mesa. The first entries in this part of the Homesteading Study Area date to 1897 and 1900, respectively. Unknown persons filed entries at or near Leyba Spring,

which flows from Tejana Mesa's west flank. The patent to Leyba Spring finally went to the member of another Mangas/Quemado family who was using the area by 1905 (interviews). The sons of Jose Francisco Padilla did not make entries until 1910 or later (USDI, BLM n.d.d; interviews), but the family may have used the area somewhat earlier.

This settlement in both northern and southern parts of SACA during the 1890s, especially the entries on water sources, suggests that the American Valley Company used SACA little, if at all. The truth is that the American Valley Company was only dormant. Like the hydra, it might lose a head, but soon would sprout another.

### **1908-1916: The First Resident Big Cattle Outfit**

Even at the peak of its livestock holdings, the American Valley Company seems to have used the SACA little, and almost certainly maintained no headquarters there. Its successor in the SACA, Joseph H. Nations, was quite a different story.

In September of 1903, on the verge of bankruptcy, the American Valley Company had transferred its assets to the newly incorporated Socorro Company. This deal seems to have been engineered so that Elmendorf and some associates could buy out Thomas Catron, although Catron retained an interest in outstanding debts (Westphall 1973:178-179). Meanwhile, the Santa Fe Railroad had acquired patents to several small tracts of land in the Homesteading Study Area. These included land around Cottonwood Spring east of Hogeys Mountain shown on the original 1882 survey plat (in Section 1, T.4N. R.16W.), patented in July of 1903; and tracts around both Hogeys Spring (in Section 2, T.4N. R.16W.; the correct location according to interviewees who say that USGS quad map is wrong) and an unnamed lake (in Section 30, T.4N. R.15W.), both patented in January of 1904.

The latter two tracts lie just inside the original area that Congress had granted to the Atlantic and Pacific Railroad in 1866, which ultimately included all odd-numbered sections

for 50 miles north and 50 miles south of the right-of-way (Greever 1954:20). The first tract was part of a "lieu selection" — land that Congress some time after 1866 authorized the railroad to choose in lieu of land within the grant to which others held prior claims (USDI, BLM n.d.c). Evidently the railroad had only applied for patents on tracts it was planning to sell, for in 1905, Socorro County assessed the Socorro Company taxes on land in the same sections, presumably these very tracts (Wozniak 1983:46).

In June of 1907, the railroad received another patent, this time on a tract with a pond where Cerro Prieto Windmill is now (Section 19, T.4N. R.16W.) (USDI, BLM n.d.c).

Four months later, Joseph H. Nations of El Paso, Texas, bought land in the same section, presumably this very tract, from Hugo Seaburg, a speculator in railroad land (Figure 3.2) (Greever 1954:86; Wozniak 1983:47).

Nations had evidently taken over the American Valley/Socorro Company holdings. His manager, Shepard Casey, whom local Hispanics called "El Shepe," filed on a homestead west of Cerro Prieto in Section 35, T.4N. R.17W. This tract became the headquarters of the Nations outfit, although Nations himself remained an absentee owner. In "proving up" his homestead claim, Casey stated in 1914:

That I first went out in the vicinity of this homestead entry in December 1905, to look after some sheep belonging to J.H. Nations of El Paso, Texas; that I was then drawing a salary from Mr. Nations of \$75.00 a month; that in December 1906, I located my homestead entry at which time I began the construction of valuable improvements thereon and developed what has since been proven to be one of the best watering places in that country; that I established residence on my homestead entry in January 1907, and after discovering the water upon this land and developing the same, my salary was immediately raised as foreman to \$100.00 per month; for the reason that the sheep belonging to Mr. Nations were watered upon my homes-

tead entry; that at this time there were about 4000 head of sheep being watered at my homestead entry; that in the year 1908 and up to a portion of the year 1909, I drew a salary of \$125.00 per month and since that time, a salary of \$150.00 a month, to the present time; that in the year 1908, cattle were put out on the ranch, since which time both cattle and sheep have watered at my said homestead entry.

That I have at all times been the foreman of J.H. Nations and have looked after the stock owned by him in that country; that myself and family have at all times resided upon my homestead entry since establishing residence thereon and I have made this land the headquarters in caring for the stock of J.H. Nations. That there has been on an average since the year 1908, 200 head of cattle and about 150 head of sheep owned by J. H. Nations, which have grazed upon this homestead entry and have watered at my watering place continuously, but before 1908, there were no cattle and as stated before, about 4000 head of sheep which watered at this place (USDI, BLM n.d.e).

Nations began cattle ranching in 1908.

The switch to cattle would have required more wells. Sheep may go without water for long periods in winter by eating snow, but cattle cannot do the same (Velarde 1980). Perhaps Nations had the well at Cerro Prieto Windmill drilled on his railroad tract east of Cerro Prieto at this time, for Casey filed a Desert Land Entry near this tract (Desert Land Entries did not require residence). For some reason, Casey relinquished the entry in 1912 (USDI, BLM n.d.d).

Meanwhile, high and rising cattle prices beginning in 1910 probably encouraged Nations to put more cattle on the range. The Mexican Revolution began just in time to supply Nations with the cattle that he needed. Nations imported cattle from northern Mexico, where Pancho Villa was selling stock from confiscated estates to buy armaments and where



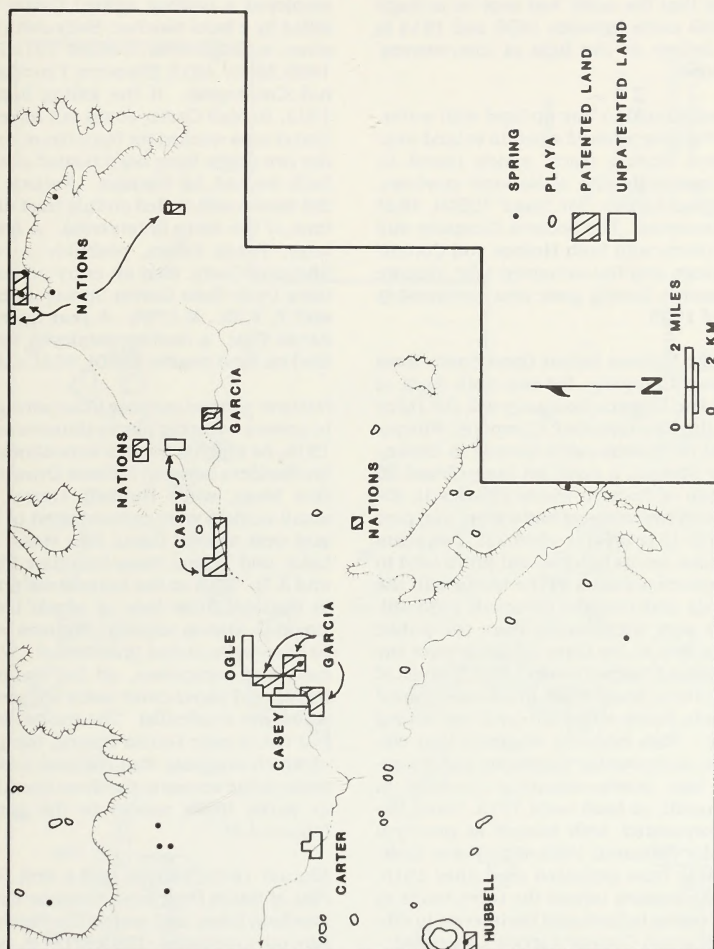


Figure 3.2: Nations, Garcia, and Hubbell landholdings ca. 1910-1915.



ranchers were selling their cattle before Villa could get them (Brandenburg 1964:47-62; Russell 1977:28-29; interviews). Perhaps Nations used the \$35,000 mortgage he arranged in August of 1911 to buy more cattle (Catron County Clerk's Office 1921-1978). Casey's statement that the outfit had kept an average of only 200 cattle between 1908 and 1914 is hard to believe in the light of interviewees' recollections.

Nations continued to buy up land with water. In 1910, Nations received a patent to land near the Hogeys Spring tract, which David B. Turner, reportedly one of Nations' cowboys, had assigned to him "for taxes" (USDI, BLM n.d.c; interviews). The Socorro Company still held the tracts with both Hogeys and Cottonwood springs and the unnamed lake, despite the company's having gone into receivership in June of 1909.

Presumably Nations leased these tracts from the Socorro Company, for not until April of 1913 did the Socorro Company sell the three tracts to the Rito Livestock Company, a major purchaser of Nations cattle located in Elmendorf, New Mexico, a point on the railroad 20 miles south of Socorro where Charles H. Elmendorf and his brothers had a store and post office, 1906-1918 (Pearce 1965:52). Two years later Nations seems to have sold Rito's land in the same three sections as the tracts with the two springs and the lake (Wozniak 1983:48). Since the only withdrawals from the public domain in two of the three sections were the former railroad tracts themselves (USDI, BLM n.d.a), Nations must have previously owned those tracts jointly with Rito, and was selling his share. This evidence suggests that Nations, Rito, and possibly Elmendorf and his associates had interpenetrating interests in Nations' outfit, at least until 1915, when Nations incorporated, with himself as principal stockholder (Wozniak 1983:48). These interests seem to have persisted even after 1915, for in 1921 Nations owned the three tracts in which he seems to have sold his interest to Rito in 1915 (Catron County Clerk's Office 1921-1978).

Meanwhile, Nations continued to acquire more small tracts. In February 1912, another widow assigned to Nations her late husband's

patent to a homestead northeast of Tejana Mesa (in Section 14, T.3N. R.17W.) where the Old Tejana Windmill now stands. Another of Nations' tracts may be the Berdell Carter entry on the Largo below the junction with Nations Draw, filed in November 1913. Nations employed a cowboy named Carter who was killed by a local rancher, Salty John Cox, on a street in Magdalena in either 1912 (Johnston 1983:28) or 1915 (Pioneers Foundation, Inc. n.d.:Cox tapes). If the killing happened in 1912, Berdell Carter could not have been the Carter who worked for Nations, of course, but the two might have been related and perhaps both worked for Nations. Nations evidently did have a well drilled on this tract around the time of the entry (interviews). A few months later, Texas Casey, probably a relative of Shepard Casey, filed an entry across the Nations Draw from Garcia Spring (in Sections 6 and 7, T.3N., R.17W). A year later, Thomas Aaron Ogle, a cowboy employed by Nations, filed on land nearby (USDI, BLM n.d.d).

Nations' general purpose in acquiring land was to protect watering places (interviews). Before 1916, he and his proxies were almost the only landholders between Nations Draw and Santa Rita Mesa, while Hubbell, Garcia, and the small holders were concentrated to the south and west around Santa Rita Mesa, Zuni Salt Lake, and Tejana Mesa (compare Figures 3.2 and 3.3). With so few natural watering places in Nations Draw (one of which belonged to David O. Garcia anyway), Nations was forced to have wells drilled (interviews). With only a couple of exceptions, all the Nations tracts mentioned above cover water sources (most of which are windmills). The exceptions are the two tracts near Garcia Spring, the placement of which suggests that Nations was trying to monopolize access to the draw near the spring, or partly block access to the spring itself (Figure 3.2).

Around 1912, Nations had a drift fence built east of SACA from near Alamosa Creek down Freeland Draw and across the North Plains to Rincon (Johnston 1983:67). A wire fence today follows a similar line along the boundary of the King and Hubbell ranches (interviews). Far from being confined to Nations Draw, Nations' outfit controlled a huge area to the east also.

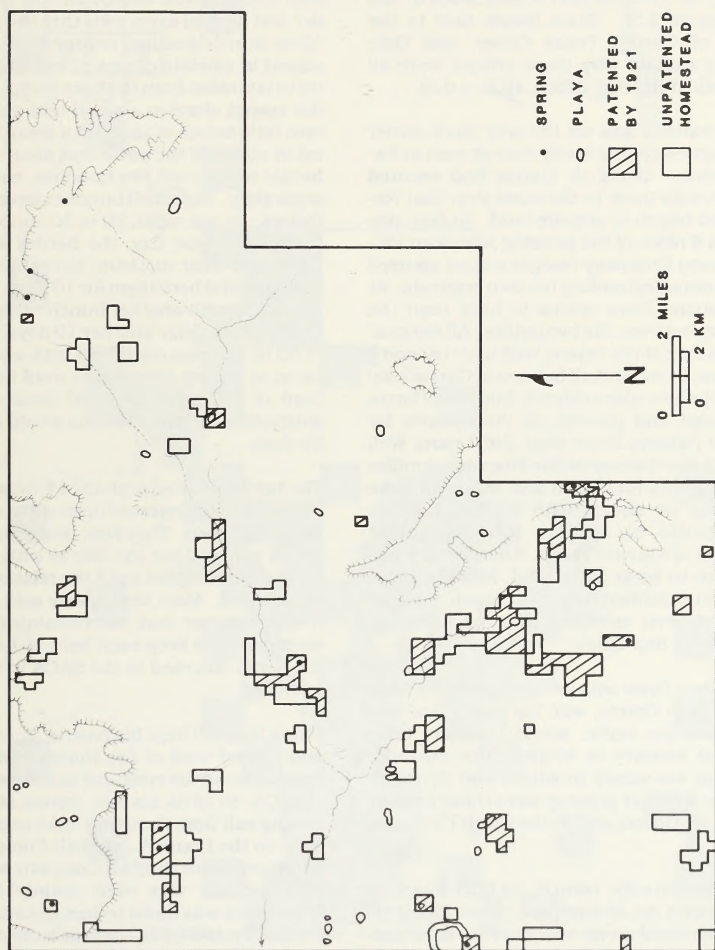


Figure 3.3: Homesteads in Homesteading Study Area, 1888-1916.



In 1916, a new method of protecting watering places became available to Nations: the Federal government allowed the State to select land from the public domain. Conveniently for Nations, the State Land Office selected large blocks of land around his other holdings (Figure 3.4). Nations later leased much of this land (Figure 3.5). State leases next to the entries of Carter, Texas Casey, and Ogle probably explain why these entries were all relinquished in 1917 (USDI, BLM n.d.d).

Joseph Nations was not the only stock owner in the Homesteading Study Area or even in Nations Draw. David O. Garcia had secured several tracts there in the same year that Nations had begun to acquire land. In fact, one wonders if news of the pending American Valley/Socorro Company reorganization spurred Garcia into safeguarding his own interests. At first, Nations Draw seems to have been the boundary between the two outfits. All Nations' holdings except the Tejana Well tract lay north of Nations Draw, and all but one of Garcia's lay south. Nations also evidently bounded Garcia on the east and possibly in the uplands far south of Nations Draw near Old Tejana Well (Figure 3.2). If many of the Hispanic families between Santa Rita Mesa and Zuni Salt Lake ran sheep on shares with Garcia, Garcia's range could be said to have extended northwest of Nations' range. After the two outfits began to lease State land, Nations' holdings circumscribed Garcia's much smaller area, and even extended into the township west of Zuni Salt Lake.

The Nations Draw was lowland range for both outfits. Both Garcia, with his sheep, and Nations, with his cattle, would therefore have used that country in winter. The uplands, somewhat too snowy in winter and therefore better for summer grazing, were those around Atarque for Garcia and in the North Plains for Nations.

Garcia reportedly owned 14,000 head of sheep, which he divided into herds of 1,000. With each herd went one man to herd and another to cook and move the camp. The men lived in tents. In winter, each herd consisted of breeding ewes. Female lambs for replacement ("yearlings") would have made up a separate herd. The winter herds left SACA and

reached Atarque by May 10, when lambing started.

Garcia maintained several base camps for lambing at Atarque Lake and other watering places. At each base camp, a cook served the men who cared for each herd--the normal herder and several extra men that the practice of "drop-bunch lambing" required. Most herders stayed in satellite camps at varying distances up to two miles from the base camp. Each herder stayed alone in a small tent and kept his own little bunch of sheep in a small brush corral at night. If the outfit was short-handed, a herder might tend two bunches, each penned separately. The small bunches were formed as follows: in one night, 20 or 30 lambs might be born. The next day, the herder would take these and their mothers, altogether 40 to 60 animals, and herd them for 10 days, then combine them with another bunch to make a flock of 80 to 120. After another 10 days, each flock of 80 to 120 was combined with another, and so on in 10-day increments until the summer herd of 500 ewes and 500 lambs was consolidated. The process thus would take about 50 days.

The herders paired orphaned lambs and those whose mothers rejected them with ewes whose lambs had died. They kept the lamb in a small brush pen and put the ewe in with it at night for five or six nights until the relationship was established. Most lambs were sold at the end of the summer and the remaining bands of ewes paired to keep each herd at 1,000 before the herds returned to the SACA in winter (interviews).

Frank Hubbell kept his base at Zuni Salt Lake and ranged west of the Homesteading Study Area as far as the state line in the western part of SACA. In 1910, his son, James, started harvesting salt from Zuni Salt Lake under a State lease to the Frank A. Hubbell Company. The harvesters were Hubbell Company shepherds, and the salt was used mainly for stock. Production was down to less than a ton a day (Bradbury 1967:37). James Hubbell and his two brothers, Frank Jr. and Roman, took over their father's business at this time, with James running the Y Ranch. They had their own feeder operation in Pajarito (Hubbell 1963; Moyer 1979:66-67).



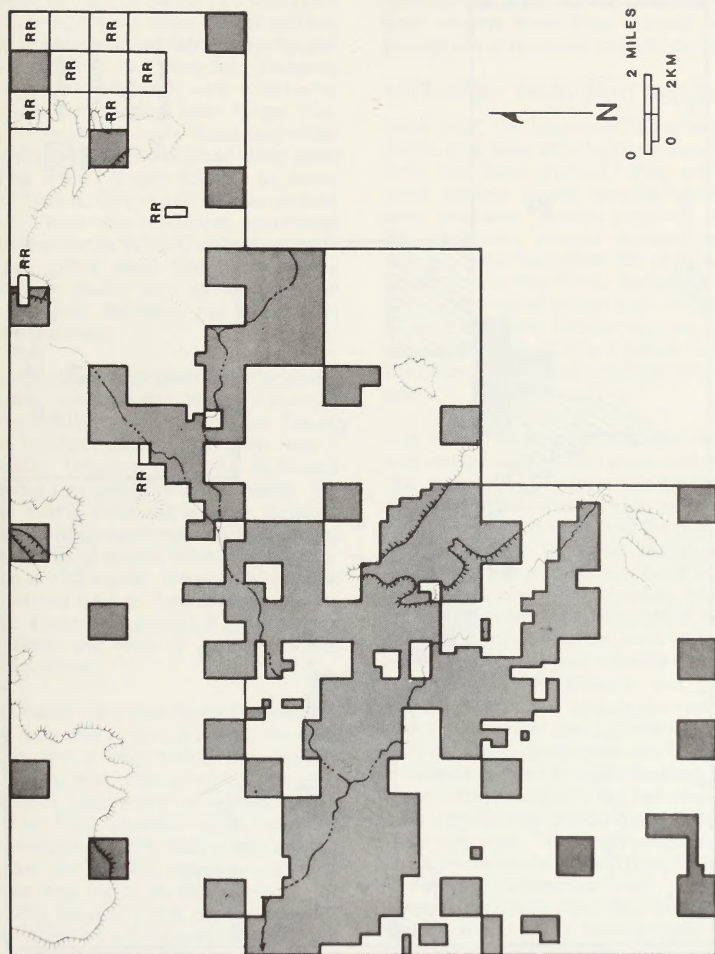


Figure 3.4: State land selections (shaded) in the Homesteading Study Area, 1916-1922.

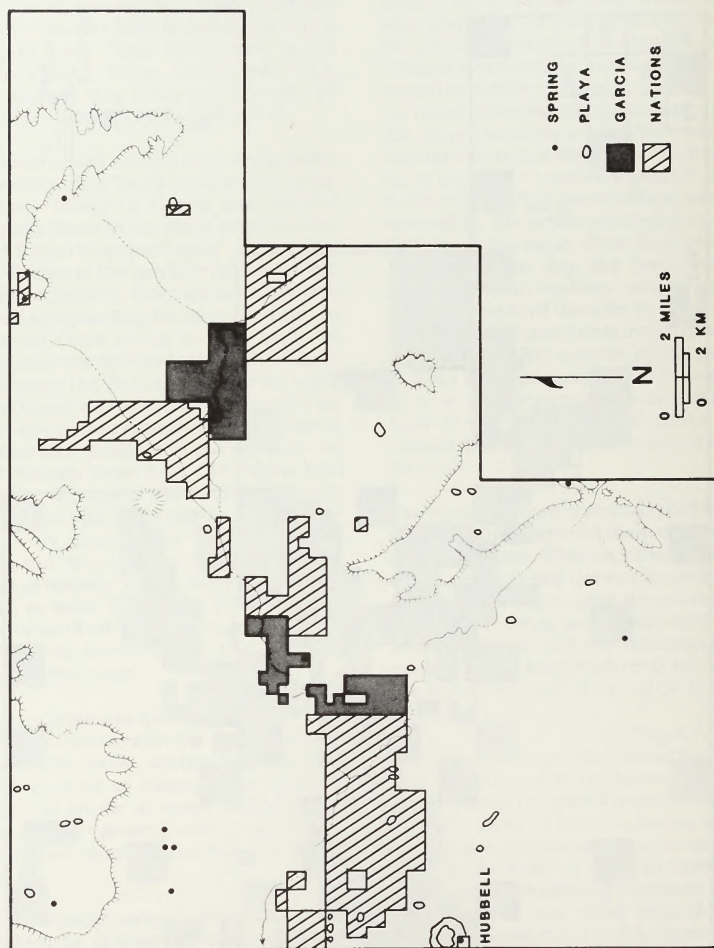


Figure 3.5: Nations, Garcia, and Hubbell landholdings, early 1920s.



The other people in the Homesteading Study Area after Nations arrived were mainly the same Hispanic small holders who had settled there earlier and other Hispanics from the communities near SACA (USDI, BLM n.d.c, n.d.d). They were concentrated on the west side between the foot of Santa Rita Mesa and the west side of Tejana Mesa. Most settlers west of Tejana Mesa raised cattle or sheep and goats on a small scale. They had 160-acre homesteads, generally each with a watering place and the surrounding open range. The watering places were usually hand-dug wells. People would not file a homestead claim until they had hit water. If they failed to hit water after 60 or 70 feet, they would give up and try elsewhere. Those who ran sheep sometimes ranged them as far as 20 or 30 miles from their homestead. They used the Tejana Mesa homesteads in winter and uplands around Mangas, Red Hill, Techado, and so forth in summer (interviews).

A few small holders also came from far away. One was the cattle rustler "Henry Coleman" (Street Hudspeth). Originally from Texas, where his brother, Claude Hudspeth, was a State Senator, Coleman ran cattle in Mexico for a Deming rancher during the 1890s. He also stole cattle from the nearby Mexican colonies of Mormon fugitives and was caught and jailed briefly in Mexico (Pioneers Foundation, Inc. n.d.:Cox tapes). Eventually, he took up a homestead west of Tejana Mesa just inside SACA, where he enjoyed the friendship of his neighbors, the sons of Jose Francisco Padilla (interviews).

Another outsider who came to the Homesteading Study Area was Salty John Cox, the man mentioned above who killed the cowboy employed by Nations. People named Cox after Zuni Salt Lake, near which he settled, to distinguish him from another John Cox near Datil (interviews). Cox had worked with Coleman for the Deming rancher (although evidently he was not in on the rustling). He later ran 700 head of cattle on two ranches near Silver City; he went broke in 1908 and the bank took "everything I had in the world." The next year, he came to the Salt Lake country, first camping west of Tejana Mesa, then filing on a homestead south of Zuni Salt Lake in 1910 (Pioneers Foundation, Inc.

n.d.:Cox tapes; Reeve 1961:38-39; USDI, BLM n.d.c, n.d.d.; interviews). The entry was not patented until 1920. This area was several miles west of the concentrated settlement along Tejana Mesa, where water was probably scarce. Cox had expanded his operation, presumably after having wells drilled, and soon became more than a small holder, although not of the same magnitude as Nations.

## 1917-1930: World War I and Its Effects

Until 1917, the movement of settlers into the SACA, or at least into the Homesteading Study Area, had been gradual. Most settlers were small holders as the younger generation of local Hispanic families acquired new land. The settlement process changed completely, however, after December 29, 1916, when Congress passed the Stock Raising Homestead Act. The flood of people from Texas and Oklahoma into New Mexico was one of several events of the World War I period that affected the history of land use until the Great Depression.

The Stock Raising Homestead Act allowed each settler to claim 640 acres, rather than the 160 acres allowed under the 1862 law. One could get title to this acreage by paying a \$34 filing fee, living on the land for at least seven months a year for three years, building a "habitable" home, installing \$800 worth of improvements, and, after five years, paying a \$34 "proving up" fee (Mosk 1963; USDI, BLM n.d.d; Vogt 1955:38). Of course, even 640 acres were not enough to support a family through stock raising in the Southwest, but prospective homesteaders from outside the region did not necessarily know that. Many of the settlers may have been former tenant farmers whose landlords decided to raise livestock instead of crops. The passage of the law also coincided with high wartime demand and high prices for meat and wool. The high prices encouraged stock producers to expand their land holdings. The federal government also encouraged expansion through the War Finance Office, which offered stock raisers easy credit (A. Cleaveland 1941:308-309; interviews).

Thus, both small holders and large ranchers scrambled for more land. As homesteaders withdrew more and more land from the public

domain, they forced ranchers to lease land from the railroads or the State (Mosk 1963). For reasons not entirely clear, the State of New Mexico was allowed to select land from the public domain. The State evidently targeted ranching areas so that it could collect lease fees from the land-hungry ranchers.

As previously mentioned, the State had made the first such selections in the SACA, or at least the Homesteading Study Area, in 1916. By 1919 it had withdrawn large blocks of land from the public domain around Nations' range. Withdrawals continued on a smaller scale through the 1920s (Figure 3.4) (USDI, BLM n.d.a).

The reaction of the ranchers to these changes in land ownership was predictable. They felt ambivalent toward the State, which required them to pay for the use of land in the public domain, but kept the land from the clutches of the homesteaders. They hated the homesteaders, who fenced the open range that had been public domain and forced the ranchers to lease from the State.

As one interviewee remarked, one always hears about "wars" between sheepmen and cattlemen, but here the "war" was between the big ranchers and the small holders.

The attitude that prevailed among the big ranchers is evident in the words of Agnes Morley Cleaveland, a member of a wealthy family that was among the first to run cattle around Datil.

They came in family groups, in any sort of conveyance that would roll, their household furnishings piled high and the overflow — washtubs, baby buggies, chicken coops — wired to any anchorage that would hold.

In trucks, in automobiles, dragging heavy trailers, the rare exception in horse drawn wagons, they came, and with them, a new order.

The first wave of these invaders into our "open range" kingdom suffered a sordid hardship such as the pioneer ranchman never knew. The home-

steader did not ride far and fast. He walked, he grubbed, he starved. Soon he had to face the hard fact that his 640 acres could not support his family.

His bean crop failed far too frequently, his little patch of corn wilted with too great regularity under prolonged drought.

Beaten, he gave up and moved on, or back to where he had started from. That is to say, some did (A. Cleaveland 1941:332-333).

These trends manifested themselves clearly in SACA. Tables 3.2 and 3.3 show homestead entries in the Homesteading Study Area from 1883 to 1940. Table 3.2 shows that the number of entries varied little until the beginning of World War I, and then it increased only slightly; however, in 1918, a year after the passage of the Stock Raising Homestead Act, the number of entries skyrocketed.

The delay between the enactment of the law and the increase in entries probably reflects the time-consuming steps that preceded the General Land Office's allowance of an entry application, especially for the prospective homesteader from as far away as Texas or Oklahoma.

First, the homesteader would have to visit either the General Land Office in Santa Fe or the local Land Register to find out which tracts were still available. Many could not make such a trip until they had sold a crop or earned the money to pay for the trip and the entry fee. After scraping the money together, the homesteader would travel to the place and try to find the section markers that the original surveyors had left in the 1880s. Often he would need to pay the local land surveyor for help.

If satisfied with the tract, he would return to Santa Fe or the local Land Register (often the same person as the surveyor) and apply for an entry on the tract. Bureaucratic bungling such as use of the wrong application forms tended to delay the General Land Office for several months in allowing the entry (Boyett 1974:11-19; USDI, BLM n.d.d; interviews).



Table 3.2: Homesteading in the Homesteading Study Area by Entry Status, 1883-1940

Year	Est. No. Entries Later Patented*	No. Entries Not Later Patented	Total	Year	Est. No. Entries Later Patented*	No. Entries Not Later Patented	Total
1883	--	4	4	1921	2	15	17
1890	1	--	1	1922	--	12	12
1892	1	--	1	1923	4	1	5
1893	--	1	1	1924	6	1	7
1897	1	1	2	1925	3	2	5
1900	--	1	1				
1901	2	1	3	1926	3	2	5
1904	1	1	2	1927	1	20	21
1905	2	--	2	1928	--	8	8
				1929	1	5	6
1906	2	--	2	1930	8	13	21
1907	2	--	2				
1908	2	1	3	1931	9	22	31
1909	1	3	4	1932	11	9	20
1910	6	1	7	1933	13	6	19
				1934	9	7	16
1911	2	3	5	1935	10	--	10
1912	2	6	8				
1913	4	3	7	1936	4	--	4
1914	2	2	4	1937	1	--	1
1915	5	5	10	1938	1	--	1
1916	6	10	16	1939	--	--	1
1917	9	9	18	1940	1	--	1
1918	12	43	55				
1919	3	9	12				

\* Entry is assumed to antedate the patent by five years, unless it was a cash entry.

Table 3.3: Homesteading in the Homesteading Study Area by Ethnicity, 1883-1940

Year	Est. No. of Entries*	Ethnicity of Entryperson Spanish-surnamed	Other	Un- known	Year	Est. No. of Entries*	Ethnicity of Entryperson Spanish-surnamed	Other	Un- known
1883	4	--	--	4	1921	17	1	16	--
1890	1	--	1	--	1922	12	2	8	2
1892	1	1	--	--	1923	5	1	4	--
1893	1	--	--	1	1924	7	3	4	--
1897	2	1	--	1	1925	5	--	5	--
1900	1	--	--	1					
1901	3	3	--	--	1926	5	--	5	--
1904	2	2	--	--	1927	21	8	13	--
1905	2	--	2	--	1928	8	4	4	--
					1929	6	--	6	--
1906	2	2	--	--	1930	21	--	21	--
1907	2	1	1	--					
1908	3	2	1	--	1931	31	3	28	--
1909	4	4	--	--	1932	20	2	18	--
1910	7	4	3	--	1933	19	2	17	--
					1934	16	1	15	--
1911	5	4	1	--	1935	10	3	7	--
1912	8	5	3	--					
1913	7	5	2	--	1936	4	--	4	--
1914	4	1	3	--	1937	1	--	1	--
1915	10	7	3	--	1938	1	--	1	--
1916	16	9	6	1	1939	--	--	--	--
1917	18	7	10	1	1940	1	--	1	--
1918	55	13	42	--					
1919	12	5	7	--					
1920	6	1	5	--					

\*Total number of entries from Table 3.2.

Table 3.3 shows that, until 1917, most homesteaders had Spanish surnames, an indication of local origin, since the communities around SACA were mostly Hispanic and since all Hispanic homesteaders identified by interviewees were local. In 1917 and afterward, however, Spanish-surnamed homesteaders were always in the minority. Most of the non-Hispanic homesteaders were from Texas, Oklahoma, and eastern New Mexico (USDI, BLM n.d.d; interviews).

The new Anglo homesteaders took up land all over the Homesteading Study Area, but especially in the upper reaches of Nations Draw (Figure 3.6). Homesteaders also settled around the North Plains, where Nations' holdings extended. According to one of these homesteaders, the area farther west around Santa Rita Mesa, Zuni Salt Lake, and the west side of Tejana Mesa was "better" because it was warmer (it was also less dissected, less forested, and more grassy, so that it probably could support more livestock per acre). Nevertheless, comparatively few homesteaders took land there because the "Mexicans" had already taken the "choicest land that Hubbell and Nations didn't get" (interviews).

The new homesteaders also faced the problem of water. As Nations' investment in well drilling shows, water was scarce in the upper Nations Draw. The homesteaders could no longer move from one tract to another until their digging hit water, as the Hispanic people had done in the days when land was more plentiful. Homesteaders were forced either to hire a well driller (local drillers included John Finch, Leslie Carter, and Heck Whitley), or to haul water from outside (interviews).

The nearest wells belonged to Nations, who resented the homesteaders for moving into his territory. The conflict intensified as Nations put more cattle on the range to cash in on the high wartime prices. By this time, he also had evidently rid himself of the remaining sheep. In 1916 or 1917, he imported several hundred long-horned Chihuahua cattle that he had bought from Pancho Villa, who had evidently appropriated them from the rancher Luis Tereazas. Perhaps because other land was so scarce, Nations had kept these cattle on top of Tejana Mesa (Johnston 1983:91). At any rate,

he forbade the homesteaders to use his windmills, and went so far as to post gunmen at the wells (interviews).

Many homesteaders lived in log cabins or "cedar picket" houses. Picket construction seems to have been especially popular, probably because it required no more than short timbers from the surrounding scrub forest and was easy to construct. The homesteaders' main source of income was cattle. Often brothers and sisters, or a couple and their grown children, would take up adjoining homesteads in a block of several sections that they could use as a unit; thus, even if only one homestead had a watering place, the waterless sections could be used. Many landholdings were too small to support all the cattle that many families needed, so they also used any neighboring "unfenced" range. This situation infuriated the big ranchers who considered the range theirs through prior appropriation. The homesteaders further supplemented their stock-raising income through such sidelines as planting crops, breaking cows to milk and selling the milk and butter, and peddling tire patches (Johnston 1983:22; interviews). Some may also have resorted to rustling cattle and saddle horses, which they reportedly drove to Gallup to sell to Navajos (Wozniak 1983:50).

Probably such rustling was on a much smaller scale than that of Henry Coleman. Coleman sold his homestead west of Tejana Mesa in 1917 when he split up with his wife, who was soon killed by assassins, themselves never brought to justice. Coleman then moved about 25 miles northwest near Goat Ranch (in or near the western part of SACA). Finally caught red-handed in Gallup, Coleman was arrested but jumped bail and fled to Mexico. When he returned after several months, Sheriff Tom Curtis (a new homesteader) formed a posse that included Coleman's former buddy Salty John Cox, who shot and killed Coleman after the posse had cornered him (Johnston 1983:22-25; Pioneers Foundation, Inc. n.d.:Cox tapes).

Central places that consisted of stores, post offices, schools, churches, and so forth, would coalesce spontaneously around whatever community facility came first. The first facility, in



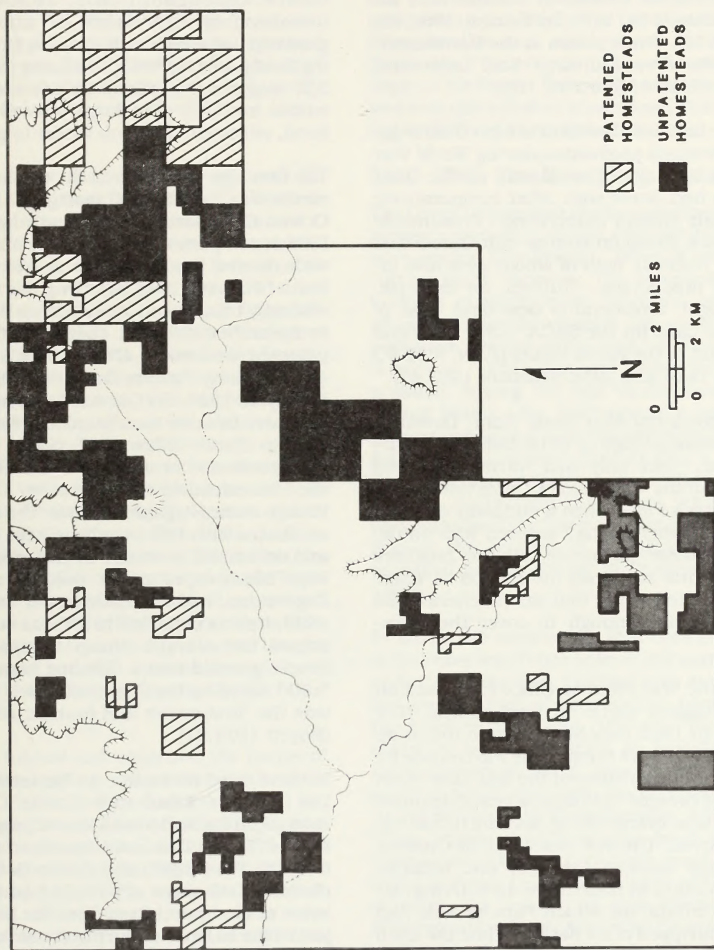


Figure 3.6: Homesteads in the Homesteading Study Area, 1917-1922 (new entries only).

turn, was usually located near a dependable watering place. Often it was a store at a crossroads, as at Datil and later Omega, Pie Town, and Fence Lake (A. Cleveland 1941:25, 333; DeWitt and Wilson 1975:11; French 1927; Pearce 1965:44, 121, 161; Vogt 1955: 96). Individuals commonly donated land for schools (Boyett 1974:36; Levine et al. 1980:11; Meyer 1978). Such places in the Homesteading Study Area included Salt Lake and Techado (Pearce 1965:163, 169).

Hispanic families also seem to have tried to increase livestock production during World War I. Many took sheep on shares as the Baca brothers had, some with other comparatively small-scale owners (interviews). Presumably others took sheep on shares with Garcia and possibly Hubbell, both of whom were also increasing production. Hubbell, for example, had bought considerable new land west of Zuni Salt Lake (in the SACA, T.3N. R.20 and 21W.), and in the North Plains (T.3N. R.12W.) between 1914 and 1916 (Wozniak 1983:47).

The balloon burst after World War I. Livestock prices remained high in 1919, but plunged the next year. Not only had wartime demand ceased, but the War Finance Office touched off the Livestock Panic when it suddenly called in loans that ranchers had secured with cattle. To make these payments, all the ranchers dumped their cattle on the market at once. Prices then fell so low that the ranchers could not even make enough to cover their payments.

Finally, the War Finance Office foreclosed on the mortgaged cattle in west-central New Mexico. In 1922 they hired men to round up the stock and drive them to the Rio Grande for auction. Nature delivered the last blow when a drought ravaged the range, already denuded from wartime overstocking, and the remaining cattle starved. The New Mexico Cattle Growers Association induced the U.S. and Mexican governments to let them move the starving cattle into Chihuahua, which Pancho Villa had recently stripped of its herds. While the Datil cattle baron, Ray Morley, president of the NMCGA, accompanied the cattle to Mexico in 1924, the bank in Magdalena, of which he was also president, failed. As a result, many ranchers in western Socorro County, both

small and large, were ruined and moved away (A. Cleveland 1941:308-314; Johnston 1983; interviews).

This downward spiral oppressed the inhabitants of SACA and surrounding settlements throughout the 1920s. The uncommonly high ratios of unproved to patented homestead entries in the Homesteading Study Area between 1918 and 1922 (Table 3.2) suggest that many homesteaders were ruined and left. The large owners also suffered, although they took longer to go under.

The first sign of trouble in the available documents was the \$50,000 mortgage that David O. and Candelaria C. Garcia arranged with a Denver company in October 1919 and secured with deeded land and land leased from the State (Wozniak 1983:51). The mortgage was evidently transferred to the Gallup State Bank in December 1923. It covered 520 acres of patented land and 5,450 acres of State land, all of it along Nations Draw (see Figure 3.5). Finally, in 1926, the Garcias sold the patented land to none other than Frank Hubbell (Catron County Clerk's Office 1921-1978). Available documents do not indicate any further use of the Homesteading Study Area by Garcia, although some Hispanic families who ran sheep on shares with him may have kept the sheep and continued to winter in the area. Garcia kept his Atarque ranch but, by the Great Depression, had evidently lost it as well. In 1933, he was beholden to a Texas couple who owned the Atarque Sheep Company. The couple granted him a "lifetime permit to run 1,000 sheep on the [Atarque] ranch," since he was the "first owner and founder of Atarque" (Boyett 1974:21).

Nations fared no better. In September 1921, the Nations Land and Cattle Company mortgaged its deeded and leased properties for \$216,675.22. This land, mainly in the SACA (T.3-4N., R.14-18W.) and the North Plains, included 1,040 acres of patented land; 30,732 acres of land purchased from the State "subject to the balance of the purchase money due the State of New Mexico" (which evidently was never paid since the tracts described remained state lands); 127,471 acres leased; and 1,080 acres of scrippped land selected and paid for but not yet patented.



Nations finally paid the \$35,000 mortgage (from 1911) in 1924, but went bankrupt anyway. His ranch was sold at auction in Santa Fe. Frank Hubbell, according to rumor, was the only bidder and got the land and the state leases for \$30,000, a figure that may or may not be accurate. In January and February of 1925, the Magdalena Land and Cattle Company (presumably a reorganized Nations Company) sold all of Nations' patented land to Hubbell, but the deed does not specify the price (Catron County Clerk's Office 1921-1978).

Hubbell, too, was forced to mortgage land. He mortgaged the Y Ranch to United Cattle Loan Company of Kansas City, Missouri, in 1921, for \$262,076.50. He repaid this loan in 1925, but the next year he mortgaged both land at the Y and the patented land in SACA to the Arizona Livestock Loan Company of Flagstaff, Arizona, for \$150,000. The Hubbell Company repaid this loan in 1931. Hubbell also bought land in SACA west of Zuni Salt Lake (in T.3N. R.19-20W.) in 1921 and 1923. After that, the only property he bought in the SACA vicinity was in the former Nations and Garcia ranges. First, in 1924 he bought land from the estate of Leroy D. Moore, a speculator in railroad land, in the Homesteading Study Area and to the east (T.3N. R.17 and 18W.; T.3N. R.14W.; T.5N. R.15W.). At the same time that he bought the Magdalena Land and Cattle holdings, he also purchased a patented homestead located next to Garcia Spring, from the widow of a son of Edward Provencher. He then bought very little land and sold none in the vicinity of SACA until 1939 (Catron County Clerk's Office 1921-1978).

By 1926, Hubbell had taken over the ranges of both Nations and Garcia from Nations Draw to the North Plains, and had added them to the land he owned west of Zuni Salt Lake. He had also leased land next to his holdings, which the state had selected during this period. He reportedly had "lost" the lease on Zuni Salt Lake to I.N. (Newt) Curtis, one of the new homesteaders and the brother of Sheriff Tom Curtis, in 1926. Newt Curtis had been appointed to represent Catron County in the state legislature at this time (interviews). The store at Zuni Salt Lake operated in 1920 under the eye of Isidore Davila, but closed in 1923 or

1924, when George Henderson used the building as a warehouse from which he sold salt (interviews).

Meanwhile homesteaders like Hubbell were moving into the void left by Nations and Garcia. Although the number of entries by 1922 had sunk to pre-World War I levels and stayed there for the next eight years, the number jumped to 21 entries in 1927. All were on the edges of the former Nations and Garcia ranges, and only one was ever proved up (Table 3.2 and Figure 3.7) (USDI, BLM n.d.d).

## 1930-1942: The Great Depression

The Great Depression pushed another wave of homesteaders from Texas and Oklahoma into west-central New Mexico. Some of them were ruined small farmers; the remainder were landless sharecroppers, laborers, or people whose parents' farms were too small to support them (Boyett 1974; Vogt 1955:16-17; interviews). This run on homesteads was probably among the last in the continental United States. By 1940 (when it was over), homesteading was receiving attention from the media in the form of Russell Lee, a Federal Farm Security Administration photographer whose collection of more than 600 photographs of Pie Town and detailed information on the subjects of the photographs are deposited in the Library of Congress (Hurley 1983).

Probably the community that bore the brunt of the wave was Fence Lake at the northern tip of SACA on the Zuni Plateau near Atarque. A few people had already taken homesteads there before 1930 (Vogt 1955:16). The locality evidently was not settled as heavily as the lower country in SACA, however, perhaps because it is too high even for successful year-round ranching, let alone farming. After 1930, when homesteaders sought land in west-central New Mexico, they were more likely to find it in Fence Lake than in most of SACA. As a result, the number of new entries in the Homesteading Study Area of SACA, even in the peak year of 1931, did not approach the all-time high of 1918. Nevertheless, homesteading surged in the Study Area between 1930 and 1935 (Table 3.2) (Boyett 1974:18; interviews).

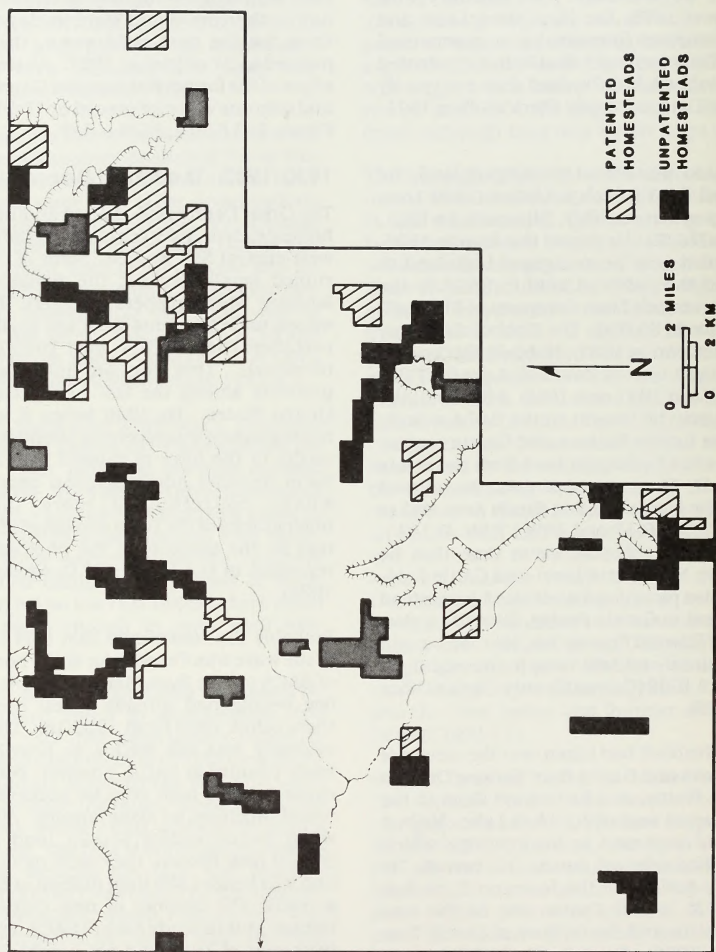


Figure 3.7: Homesteads in the Homesteading Study Area, 1923-1929 (new entries only).



In both lowland SACA and Fence Lake, the new homesteaders were dry farmers rather than small-scale stock raisers like their predecessors. They grew pinto beans and corn for cash, and kept gardens and some livestock for their own consumption (Wozniak 1983:54). As all homesteaders had since 1916, they congregated in the waterless upper Nations Draw (Figure 3.8). Many hauled water from wells that earlier homesteaders and ranchers had drilled, including Nations' old wells (Wozniak 1983:54). These people could not turn to small-scale stock raising, as their predecessors had, because their homesteads had little or no neighboring open range (Vogt 1955:30-31). Evidence that even the poor quality land of the upper Nations Draw had filled is that, for the first time, many tracts were subject to a rapid succession of entries as the earlier homesteaders relinquished and the latecomers snapped up the relinquishments, paying the relinquishing party for the improvements (Boyett 1974:48; Vogt 1955:38). Among the improvements was often the new homesteader's signature — a hastily built cabin of logs or cedar pickets. Only after they had stayed awhile would families build larger, more substantial dwellings of stone or adobe (Boyett 1974:51).

Some of the new homesteaders, like their predecessors, soon acquired additional land by purchase, lease (state land), or rental from a landowner (including the railroad) (Vogt 1955:36-40). These acquisitions enabled them to raise cattle. Cattle buyers came to the country and contracted with each stock raiser for a certain number of yearling steers to be delivered in October. Homesteaders with few cattle to sell and the same delivery dates pooled the cattle for the long drive to Magdalena. The drive took 10 days, and the weighing was "hog eat hog," as the scales attendant gave precedence to the herds of big ranchers that had arrived later. All this time, the homesteaders' cattle were "on hold" and lost weight and value.

The people who farmed, because they were limited to their 640-acre homesteads, found that the climate was too dry and cold for dependable crops. They had to "piece a living together" from a variety of other sources — gathering piñon nuts and selling them to local

merchants or to the Charles Ilfeld Company in Magdalena; keeping chickens and trading the eggs; hunting rabbits, deer, and antelope; and trapping coyotes, wildcats, badgers, skunks, and the wild horses that ran along the Zuni Salt Trail between Moreno Spring and Atarque. They also earned wages from part-time temporary work on Civil Works Administration projects, at the large ranches during the peak seasons, and so forth (Boyett 1974; Vogt 1955:32; interviews). Records of unproved homestead entries show that many homesteaders applied to the General Land Office for leaves of absence of six months or longer, perhaps to take jobs "back home" or elsewhere (USDI, BLM n.d.a). Some homesteaders perhaps hoped for an oil bonanza on their land when SACA enjoyed a brief "oil rush." A man named Bruton bought up leases and drillers came to Nations Draw and carved their names on a rock next to the headquarters of Hubbell (formerly Nations) Ranch. Perhaps the "rush" came about simply because the area was unexplored (interviews). An oil and gas permit issued near Techado (all of Section 4, T.4N. R.15W.) in 1927 and cancelled in 1929 may also be connected with the "rush" (USDI, BLM n.d.a).

Like Nations and the first wave of homesteaders, the Hubbells and the second wave did not get along. Frank Hubbell Sr. died in 1929 and his sons were now completely in charge. The cornfields on homesteads in the middle of the Hubbells' range tempted the sheep, especially when herders cut the fences (interviews).

At their peak, the Hubbells reportedly owned 25,000 head of sheep. They also may have taken in sheep of large owners who did not have enough range elsewhere (interviews). Frank Hubbell Jr. ran the ranch in Nations Draw, now called the "Cerro Prieto Ranch," which served the sheep as winter range. James Hubbell ran the Y Ranch where he reportedly raised cattle, but also kept the sheep there in summer (Hubbell 1963; Moyer 1979; interviews). Frank Hubbell Sr. had bought up all the watering places along the drive route, which ran east of SACA to Omega (old Rito Quemado), Mangas, and Horse Springs. Some of the sheep also summered on the North Plains. The lambing grounds were on the Cerro Prieto Ranch near Garcia Lake.



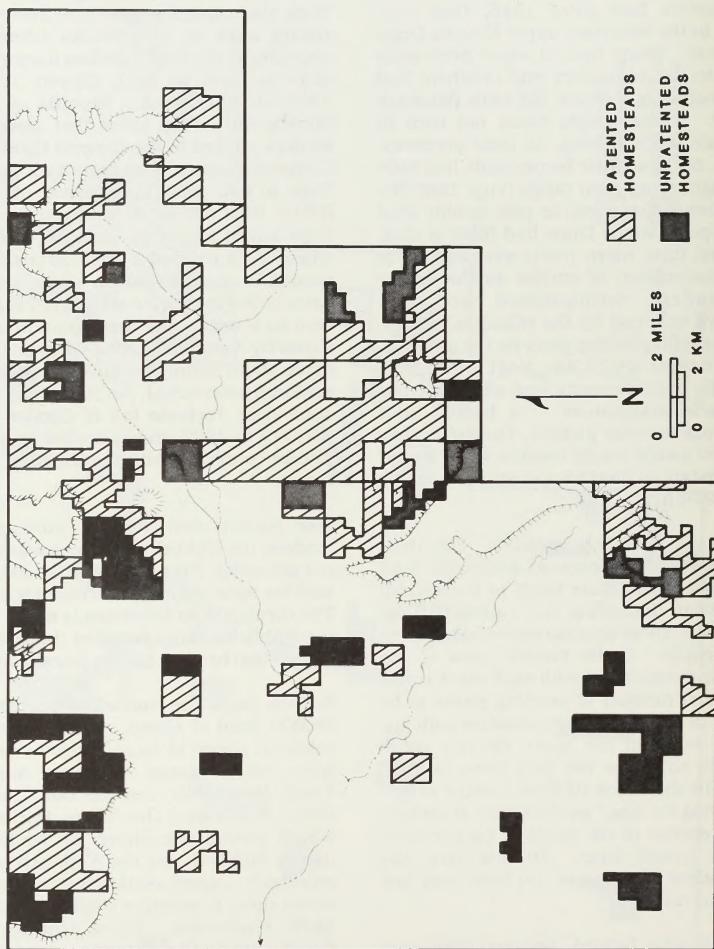


Figure 3.8: Homesteads in the Homesteading Study Area, 1930-1934 (new entries only).

Shearing and dipping may have occurred near the Cerro Prieto headquarters or on the summer range. The Hubbells employed a "Mexican" shearing crew that brought their own mechanical shearing plant. The wool went to the Frank Bond Wool Warehouse in Albuquerque, where it was auctioned to buyers for eastern textile mills. In the fall, sale lambs were driven to Magdalena over the famous stock driveway bound for feedlots in which Frank Bond held an interest (Hubbell 1963; Moyer 1979:68; interviews). Evidently the Hubbells had given up their own Pajarito feedlot.

Frank Hubbell Jr. recruited herders through the company office in Albuquerque. He deployed them in pairs, each with a herd of 1,500 ewes in winter. Like Garcia's herders, one man cooked and tended the camp while the other went out all day with the herd. The men shared a teepee-like tent and moved camp every few days, packing their equipment on a string of six burros. Hubbell hired a caporal for every three or four herds.

The caporal circulated among the herders with a pack horse and told them where to camp. On the 15th of each month, Hubbell and the caporales would meet each group of camp tenders at a specific place and give them food from a wagon. Often the men had been without flour for a couple of weeks because the burros had gotten into it. Sometimes the herders would trade meat on the sly to nearby homesteaders for other foods. Hubbell also maintained a commissary at the ranch headquarters where the men could charge clothing and other personal items against their wages (interviews).

In 1934, Congress abruptly ended this last homestead rush by passing the Taylor Grazing Act. This law divided western rangelands into grazing districts administered by the Department of Interior Grazing Service (which became the BLM in 1946) "in cooperation with" boards of local stockmen. The new law required permits of all who used the public domain, assessed them fees, regulated the total number of livestock that each permittee could run on his or her entire holding (both public and private tracts) and authorized exchanges between the government and other

owners, including the railroad, to eliminate as much private land as possible from the grazing districts.

Although the law said nothing about homesteading, President Franklin D. Roosevelt soon afterward withdrew all public land from homestead entry until the Grazing Service could classify it according to its most beneficial use. Prospective homesteaders therefore were forced to wait either for others to relinquish or (ironically) for the government to classify certain tracts as suitable for farming rather than grazing (Greever 1954:144; Meyer 1978; Shepard's Citations, Inc., 1968; Stout 1970:311; Vogt 1955:32, 39).

Homesteaders and big ranchers alike saw the Taylor Grazing Act as a benefit to the big ranchers; first, it gave preference in leases to those who owned or leased land in the immediate vicinity, and, second, to those who had used neighboring land for a long time. Thus, the more land a would-be permittee had, the more he could get (Greever 1954:144; Stout 1970:318-319; Vogt 1955:34-40). The elimination of almost all homestead land also worked against the would-be small holder. Especially poignant were the thwarted hopes of sharecroppers, whom landlords in farming states continued to evict after the Soil Conservation Act of 1935 paid the landlords not to farm worn-out land (Meyer 1978).

The federal government even proposed to evict homesteaders who had managed to file on land before 1934 as part of the effort to rid the Taylor Grazing Districts of private lands (Vogt 1955:66). Agnes Morley Cleaveland articulates the attitude of large ranchers in describing the reaction of west-central New Mexico homesteaders to this plan.

In 1937 angry men muttered darkly in the streets of Quemado ...

Many had come from their little homesteads in western Catron County, in the midst of piñon and juniper forests ... from the plains to the north and from the Trechado district and from the Pie Town district and from the Mangas district, and they had gathered in defense of their homes.



Over their dry-cell radios the homesteaders listened to talk of "resettlement". With consternation they heard that plans were afoot to move them from their homes and establish them in better farming districts, but upon a third of the number of acres they now claimed. The grapevine that carries news in sparsely settled places buzzed with rumors . . . . It was a plot on the part of the predatory "cattle barons" to get the land back. Over the grapevine went forth the call to resist (A. Cleaveland 1941:349-351).

The representative of the government planning board chosen to help explain the plan at a public meeting in Quemado was Agnes Morley Cleaveland's sister, whom the homesteaders must have seen as the "cattle baron" class incarnate. Public outrage at the government's plan canceled the meeting (A. Cleaveland 1941:351).

The land records do not show any Federal Resettlement Administration (FRA) land purchases in the Homesteading Study Area, although the FRA bought out homesteaders elsewhere in northwestern New Mexico (Kelley 1982d; Levine et al. 1980). Nevertheless, in the late 1930s, homesteaders began to leave west-central New Mexico. Probably the first to do so were squatters on the public domain who had given up waiting for the government to restore the land to homestead entry (Vogt 1955:33, 39). More probably left because of drought and competition from bean farmers in southwestern Colorado (Boyett 1974:58; Meyer 1978; Vogt 1955:33; Wozniak 1983:56).

The exodus from SACA and vicinity reportedly did not begin in earnest until 1940-1941, when young men joined the Army and others went to Arizona and California to work in factories (Wozniak 1983:56). Figures 3.9 and 3.10 show land ownership in the Homesteading Study Area on the eve of this exodus.

The Hubbells owned almost all the private land along Nations Draw and, together with Frank Hubbell's associate, Isidore Davila, that around Zuni Salt Lake. The rest of the land along the draw, around Zuni Salt Lake, and in between was state land that Hubbell could

have leased and probably did. Almost all the remaining land belonged to the state or to other private owners. What little public domain remained was in the dry stretches south of Zuni Salt Lake and at the bases of Tejana and Santa Rita mesas.

Homesteaders and other small holders were concentrated in the upper Nations drainage and below Santa Rita Mesa on the outskirts of the Hubbell ranch (T3N. R.16W.; T.4N. R.15-18W.). Middle-sized owners included John Cox south of Salt Lake (T.2N. R.18W.) and the heirs of Valentin and Anastasio Baca along the Largo west of Tejana Mesa (northern part of T.2N. R.17W.). Both Cox and the Bacas had probably assembled these holdings much earlier, perhaps around World War I.

A 1916 homesteader, Grover Powell, had also accumulated a middle-sized holding of several sections around his original homestead (in T.4N. R.15W.) as had Bert Cox, a son of John, north of the Hubbell headquarters (in T.4N. R.17W.), where he had been ranching since before the Great Depression. Members of the Moore family had held several sections north of Powell and west of railroad land since World War I.

Newt Curtis continued to hold the state lease to Zuni Salt Lake, where his employees continued to harvest salt by the primitive methods of earlier times. His slogan, "A Cent A Pound the World Around," reflected the retail price of the salt (Bradbury 1967:37; interviews).

Most of the people who left in 1940-1941 sold their land to stockraisers and never returned. Thus, the Hubbell outfit, which had bought only one section in the Homesteading Study Area since 1926, bought several sections from five owners in 1940 and 1942 (Catron County Clerk's Office 1921-1978; interviews).

Rising wartime prices spurred the Hubbells to expand production once again after their reverses in the 1930s, when they had mortgaged both the Y and Cerro Prieto Ranch deeded lands, initially for \$264,000 and grew to \$334,000. They did not complete repayment until 1945 (Catron County Clerk's Office 1921-1978). Bert Cox seems to have bought out several neighboring small holders around



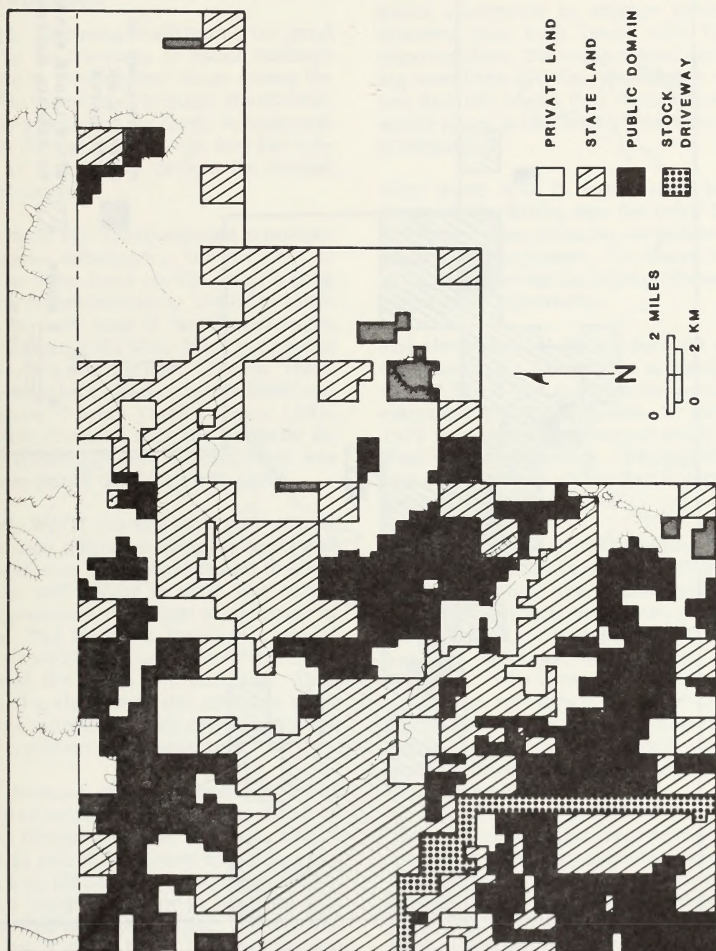


Figure 3.9: Land ownership in the Homesteading Study Area, ca. 1940 (Catron County only).

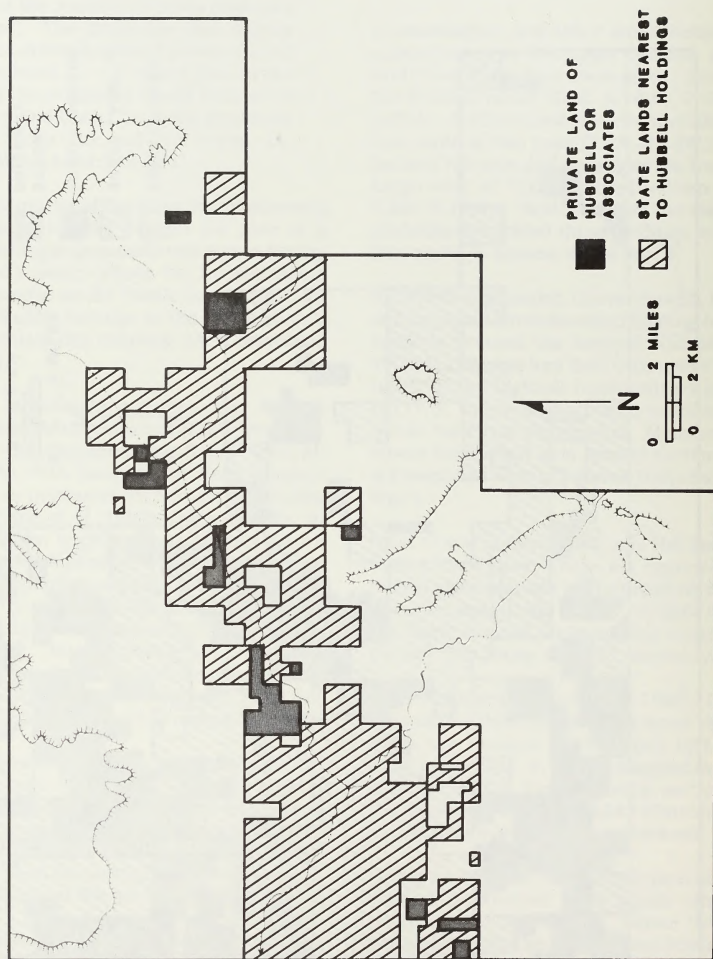


Figure 3.10: Hubbell lands and state lands most likely to be leased by the Hubbell Company in the Homesteading Study Area, ca. 1940.

this time. They were Hispanic families whose homesteads dated to the World War I period (Catron County Clerk's Office ca. 1940; interviews).

## 1942-Present: The Development of Modern Ranches

After people left during World War II, the trend toward the proliferation of small holdings reversed itself. Three other trends during the period led to the ranches of today: the elimination of any production for direct subsistence; the switch from sheep to cattle; and the substitution of mechanical devices for human labor in production.

Although never even partly engaged in production for direct subsistence, the Hubbells illustrate the other three trends. After buying out several homesteaders by 1942, the outfit acquired no more land in the Homesteading Study Area until 1961 when it bought several scattered tracts over the next 13 years. These purchases had little effect on the Hubbell land base (Catron County Clerk's Office 1921-1978). More dramatic were the Hubbells' attempts to minimize labor, the end result was the replacement of the sheep with cattle.

After World War II, herding labor grew scarce. The older men retired on Social Security and the younger ones moved to the cities to work. Some were still willing to herd, but only if wages approached what they would make in the cities. The Hubbells, therefore, replaced the herders with labor-saving facilities. First, they fenced the ranch into pastures. Then they put the sheep into the pastures unattended, the number of sheep depending on the size and condition of the pasture.

Finally, instead of many herders, camp tenders, and caporales with their multitude of tents and strings of burros, the outfit hired a few men to patrol the fences on motorcycles and check on the sheep. These men stayed at the ranch headquarters or at line camps at Chimney Well near Fence Lake, Ramon Well (Section 16, T.4N. R.13W.), Mujeres (Section 15, T.5N. R.14W.), and a rock house below Zuni Salt Lake (possibly Davila Well in Section 3, T.2N. R.19W.) (Hubbell 1963; Moyer 1979; interviews).

The sheep continued to summer on the North Plains and winter at the Cerro Prieto Ranch. For a few years, shearing was done east of Cerro Prieto, presumably near the windmill there, since the mass of sheep would need a lot of water. Shearing usually occurred near Cerro Vetado in Horse Camp Canyon. The outfit continued to engage professional shearers (now from Texas) with their own shearing plant. The sacks of wool, each weighing more than 200 lbs., moved up a conveyor belt into the trucks that hauled them, as in earlier years, to the Bond's Wool Warehouse in Albuquerque.

After World War II, lambs were no longer driven to Magdalena over the stock driveway, but hauled there in trucks, for improved roads made trucking cheaper. The lambs then went to California by rail for feeding (Hubbell 1963; Moyer 1979; interviews).

The elimination of the herders did not work well, however. Coyotes so savaged the unattended herds that one year the outfit lost an estimated \$14,000 in lambs. In addition, by 1972 wool prices had dropped and the Bond's Wool Warehouse folded. The Hubbells therefore sold the sheep and turned to cattle, which they still raise (interviews).

The smaller ranchers in the SACA favored cattle over sheep, even before World War II. Today they raise nothing else. Unlike their predecessors, they no longer supplement their income from livestock and wages by raising significant amounts of crops, livestock, or chickens. They, too, have turned to more mechanized production methods. For example, pickup trucks have largely replaced horses in range riding, and cattle are hauled away in the trucks of buyers rather than driven to the railroad on the hoof.

Today's ranchers also seem to rely on fences more than on herding to control the movement of cattle, partly because the government regulates the length of time and number of animal units that can be run on certain tracts, and partly, no doubt, because open range has been eliminated and the ranchers' holdings may be discontinuous. Vogt (1955:71-73) noted a trend toward "over-mechanization" at Fence Lake by 1950.



Perhaps the most dramatic change, was in the size of landholdings. Plats of the Homesteading Study Area townships in Catron County that date to about 1940 show 89 private landholders, excluding the Hubbells but including homesteaders with unproved entries. The land that these people owned ranged from 120 to 3,916 acres, and averaged 675 (s=507.64).

In 1984, 18 landowners in the Homesteading Study Area who either leased some BLM land or owned the surface of land with federal mineral rights, owned tracts ranging from 560 to 12,024 acres (ownership figures are not available for other landowners). An additional individual owned 40 acres. Hubbell again is excluded. The 19 landowners averaged 2,780 acres apiece (s=3,487.98). Both 1940 and 1984 figures represent only the privately owned surface areas; state and federal surface leases are not included. Over half of these landowners belong to families that came to the country during the 1930s or earlier.

The amount of federally owned surface acreage has changed relatively little since 1940. Some land has been transferred from federal to state ownership; about 6,000 acres of federal land have been sold to private individuals, and some land held privately in 1940 reverted to the federal government when homestead entries were not proved up. Overall, federal, state, and privately held acreages in the Homesteading Study Area have changed relatively little since 1940. The main change has been the consolidation of larger tracts within the privately owned acreage (USDI, BLM n.d.a.).

Perhaps the appropriate place to end this chronicle is at Zuni Salt Lake, the resource in SACA that humans have used the longest. Like the range, the lake has been exploited in an increasingly mechanized and commercialized way. Newt Curtis continued to produce salt from the lake for local livestock until 1954 or 1956, when he sold the state lease to his children. In 1960, a Los Angeles company took over the lease and began mechanized production in earnest. The owners built evaporating pans northeast of the maar and installed pumps to draw the water into them from 170 feet down in the crater. Instead of

"Mexicans" with punts and pitchforks, they hired a man to harvest the salt with a road grader. The salt was then loaded into trailers that trucks hauled to a cleaning-and-drying plant on the northern edge of the lake. Later, an even more sophisticated harvesting method employed a rotary tiller on a floating barge with hydraulic arms that reached out and pulverized the salt, which a vacuum hose then sucked out.

Crystallizing ponds were also built, but they were so poorly situated that runoff water sometimes flooded them and broke down the dykes. The salt was no longer sold for livestock, but for such essential uses as thawing highways, softening laundry water, and the mass production of ice cream (Bradbury 1967:26, 37; U.S. Senate 1976:76, 81-82; interviews).

These methods gave the lake the "desolate, defiled, and degraded condition" designated by Zuni Governor Laselute in testifying before Congress in 1976. The transfer of the lease to the Pueblo of Zuni has stilled the groaning of the tiller and truck engines, the pounding of the hydraulic arms, and the sucking of the vacuum hose. Only the runoff water silently continues to erode the dykes.

## Known Hispanic and Anglo Cultural Resources

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The San Augustine Coal Area survey recorded many Hispanic and Anglo cultural resources in the sample quadrats. These are discussed in Chapter 4. Information on Hispanic and Anglo cultural resources elsewhere in SACA comes from previous archeological surveys, documents, and people interviewed during this project.

Because the research on Anglo and Hispanic resources for this project focused on the Homesteading Study Area, most sites indicated by documents and interviews are in that area. Almost all historic sites recorded by previous archeological surveys also fall within that area for reasons given below. The sites outside the Homesteading Study Area are also listed below, but are underrepresented. The

locations of most sites other than those recorded archeologically have not been field-checked. Unless noted otherwise, all data on homestead entries and patents are from the BLM, New Mexico State Office records, and the homestead case files in the National Archives described in Chapter 1. All data on land holdings around 1940 are from the Catron County plat book of that time (Catron County Clerk's Office ca. 1940).

## **Cultural Resources Recorded by Previous Archeological Projects**

General descriptions of previous archeological projects in and around the SACA are given in Part I, although no projects conducted before 1979 recorded historic sites in SACA. Most either did not concern, or simply ignored, historic materials, even those found on prehistoric sites. The present Quadrat Survey located such an unrecorded (evidently unrecognized) historic component on one such site, which had been recorded in the 1960s.

Other pre-1979 projects, such as the Tucson Gas and Electric surveys, did record historic sites systematically along with prehistoric ones, but encountered none inside the SACA. The BLM's Quemado Planning Unit Class II Survey of 1979 (USDI, BLM 1979, 1982a, 1982b) recorded historic remains but evidently not systematically; almost all the remains recorded are on prehistoric sites.

The only projects that have systematically recorded historic cultural resources inside the SACA are the recent drill-hole and right-of-way surveys (Eck 1982; Elyea 1983; Hogan 1983; Moore et al. 1983), and the BLM San Augustine Coal Area transect survey that preceded the present sample survey (USDI, BLM 1983a).

The lands that these projects surveyed fall almost entirely within the Homesteading Study Area, thus reinforcing the bias toward that area in the ethnohistorical information collected during this project from documents and interviewees.

This section summarizes the archeological survey data on each site recorded by previous surveys. It also offers relevant information on

each site from the documentary research and interviews conducted for this project.

## **Projects of the 1960s and 1970s**

Evidence of historic use has been observed on one site recorded in SACA before 1979: LA 3918, located in the NW/4 of SW/4, Section 14, T.2N. R.17W. The prehistoric occupants of this site left a large masonry pueblo, part of which was recorded as two-story (Hammack 1964). Observers at this site during the SACA survey suggested that the two-story part may actually consist of a historic period structure built on top of the rubble mound using rubble from the mound itself.

The Baca brothers, who reportedly penned rams in the "kiva" of this site while lambing at Laguna Escondida around 1920 (see Resources Indicated by Interviews below), are the most likely people to have built this historic structure. The federal government transferred the land to the state in 1919.

## **Quemado Planning Unit Class II Inventory Survey**

### **→LA 27170:**

The site, located in the SE/4 of NW/4, Section 15, T.1N. R.20W., may date between 1900 and 1920. It consists of a prehistoric scatter of lithic and ceramic artifacts intermingled with historic artifacts and charcoal on the shore of a playa. According to the site description, the artifacts are probably from the ranch located to the northwest. The charcoal is probably from a ranch hand's fire. One wonders whether the "intermingling" of historic and prehistoric artifacts is the result of the rising and falling of the water level in the lake.

Historic artifacts include a Mason jar lid ("GENUINE BOYD CAP FOR MASON JARS"), two tobacco tins, a crown cap, a beer bottle with applied lip, and the lid from a five-ounce Health Club baking powder can. Land ownership records were not checked for this or the next two sites listed because they lie outside the Homesteading Study Area.

### **→LA 27191:**

This undated site is located in the NE/4 of NE/4, Section 9, T.1N. R.20W. A small (no dimensions are given) sandstone house foun-



dation and a few cans (otherwise undescribed) make up the site.

→ **NM-02-993 (no LA number).**

Another undated site is located in the SW/4 of SW/4, Section 24, T.1N. R.21W. A prehistoric lithic scatter surrounds a rock alignment with charcoal to show that it served as a hearth. Another rock alignment has a tobacco can next to it.

→ **LA 27391:**

Located in SE/4 of SE/4, Section 13, T.2N. R.18W., this undated site consists of a corral, otherwise undescribed. The land is public domain. In 1923, Julian Moody filed homestead entry SF 046449 on the tract, but relinquished it in 1925. Martha P. Roberts followed with entry SF 060510 in 1930, which was canceled in 1935.

The site is most likely associated with one of these homesteaders or with nearby landowners like Frank B. Cox, whose entries in a neighboring section date to 1911 (relinquished 1914) and 1918 (canceled 1924), or his older brother, Salty John.

→ **Unidentified Homesite:**

A 1930s homesite is situated in NE/4 of SE/4, Section 5, T.4N. R.18W. The survey mentioned a brush fence, but did not record it as a site. In addition to the fence, several dismantled structures, probably a cabin, root cellar, and corral, near the northeast corner of the quarter section were observed during the present project. Artifacts on the site include lard and other cans (all with sanitary seals), clear glass, shoe soles, and a washtub.

The fence of basalt cobbles and brushwood skirts the clearing to the quarter-section corner and encompasses an area that may have been a field. Semi-Lonesome Windmill is in the neighboring quarter section.

A long-time local resident whose family used the neighboring land during the 1930s did not know who had used the site, but suggested that occupants were homesteaders who never "proved up." The site lies within the homestead entry (SF 063544) of D. Julian of 803 Broadway, Lubbock, Texas. The entry was allowed in 1931 and relinquished in 1936.

## **Recent Drill-Hole and Right-of-Way Surveys**

→ **LA 37346:**

The site, located in the SW/4 of SW/4, Section 2, T.3N. R.17W., includes a component that dates to around 1910-1912. It consists of petroglyphs and trash in a rock shelter (bits of metal, a purple-glass CARTER'S bottle). These remains are a quarter of a mile east of the new Tejana Windmill. Among the petroglyphs, the legible inscriptions include dates of May 14, 1910, and 1912, the names Manuel Lusero, Ruby Carter, Amy Hamilton, and Ethel Hamilton, and several cattle brands (Eck 1982).

Manuel Lusero may have herded for David O. Garcia in the early twentieth century, as did others who spelled their surname in the same unusual way. The family was from Atarque. One or more men named Carter worked for Nations (see Historical Chronicle above). The widow of Carter, whom Salty John Cox shot in Magdalena, later roamed the country around the Mangum Ranch (the general vicinity of this site) with a small goat herd. Ruby Carter might have been this woman. None of the brands at the site matched those illustrated by Johnston (1983), which included Nations' brands. They might, however, be familiar to local people, and they might have been registered in the county seats of St. Johns, Reserve, or Socorro. Johnston does show a Hamilton ranch northwest of Pie Town in the general vicinity of Nations' North Plains holdings around 1918, although the brand does not match any of those on the rocks (Johnston 1983).

Probably Nations' outfit used the area when the dates were carved. Available sources give no date for the windmill. The site may have been a resting spot or camp for people who watered their stock there. If the well belonged to Nations, cowboys who guarded the well against the homesteaders might have used the camp and carved some of the petroglyphs. The site is on state land.

→ **LA 37360:**

The site, next to Garcia Lake in the SW/4 of SE/4, Section 29, T.4N. R.16W., antedates 1920; it consists of two dwellings, one outbuilding, a corral of 40 m diameter, and evidence of a fence around the lake. Artifacts



include brown, green, and purple glass and white crockery (Eck 1982). The land was part of a homestead entry that Alice Texana Oswald filed in 1914 and relinquished in 1916 (SF 021388). The Oswalds were "tied up with" the Hispanic families who lived around Santa Rita Mesa (interviews). Perhaps they were also connected with David O. Garcia, who in 1906 had bought the patent to a homestead in neighboring Section 32 (Wozniak 1983:47), and who may have run sheep on shares with some of the Santa Rita families.

#### ■ LA 37549:

The site is located in the SE/4 of SW/4, Section 27, T.4N. R.17W., and dates to the period 1880-1920. It consists of a brush corral 18 m by 15 m (Eck 1982). The state selected the land in 1919. The land adjoins a homestead entry that included the NW/4 of NW/4, Section 27 (SF 032902), filed by Nemecono Gonzales in 1918 and canceled in 1923. The corral's size and method of construction would seem to suggest that it housed sheep rather than cattle, for which it seems too small and fragile. Former homesteaders attest, however, that cattle and horses "respected" such fences. Perhaps the corral was used during the livestock boom of World War I, and, probably, only in winter.

#### ■ DCA-83-299:

This 1920s homesite, located in the NE/4 of NE/4, Section 11, T.4N. R.16W, includes a log cabin, root cellar, corral, and rock fence. Artifacts recorded are evaporated milk cans, sherds of canning jars, and bottle sherds of clear and aqua glass (Moore et al. 1983). In 1927, Annie Brown (later Davis) of Duncan, Oklahoma, filed on the land (SF 055720). She registered with the General Land Office for a leave of absence from October 1930 to June 1931. The GLO canceled her entry in May of 1933 for insufficient residency (USDI, BLM n.d.e). The date of the site that the survey report suggests falls during Mrs. Davis' tenure.

Several people interviewed for this project, however, suggested, on the basis of the map location, that the site might have belonged to Reuben Wright and his wife. Wright was a cousin or in-law of Bill and Frank Lee, who homesteaded after World War I in the same general area: upper French's, Lee, and Single

Mill draws (see Resources Indicated by Interviews and Site 465 in Chapter 4). Wright was a "drifting cowpuncher" who applied for Annie Davis's homestead about two months after the GLO canceled her entry.

In his Final Proof testimony, Reuben Wright said that he had lived on the land continuously since July 1, 1933. The house, a one-room log dwelling, was already in place. Wright built a log chicken house and fenced his homestead with wire the same year. The next year he built a log barn and put in a garden of two acres, fenced with wire.

In 1935, he built a dirt tank for the cattle and horses that he kept. All of the improvements except the property-line fence were in the NE/4 of Section 11. Wright's list of improvements does not dovetail with the archeological description of DCA-83-299, but the same survey demonstrably missed features on another site (see DCA-83-480 below). The proof testimony locates Wright's homesite in the same quarter section as DCA-83-299. If DCA-83-299 is indeed Wright's homesite, as the proof testimony strongly suggests, the presence of artifacts antedating Wright's tenure must be explained. Perhaps Annie Davis left a house and the Wrights moved into it. Wright's testimony that the house was there when he moved in also suggests this possibility.

Interviewees recall that Wright's wife used to take clothes from the homesite about half a mile north to wash in Cottonwood Spring. Presumably, the couple also got water there. Wright received his patent (Pat. 1097803) in 1938. He "drifted out" around that time, perhaps, like his uncle Bill Lee years before, as soon as he had made his proof.

#### ■ DCA-83-480:

The site is located on a hillside in the NE/4 of NE/4, Section 4, T.3N. R.16W., and dates sometime between 1900 and the 1930s. As the archeological survey report (Moore et al. 1983) describes it, the site consists of a 3 m x 6 m, one-room rock house; a 7 m x 10 m rock structure, possibly a barn; and a 3 m x 7 m root cellar. Field observation during the present project suggests that the barn may actually be the main house (it even has evidence of the fenced dooryard typical of local ranch

houses). The small, one-room rock house may have been an extra room for storage, work, or living. Several unrecorded structures are also evident where the site extends around the south side of the hill. These include two rock outbuildings (one a barn, another probably a barn or corn crib), at least one corral area, and a small picket pen held together with barrel strapping. More careful inspection would undoubtedly reveal still other features. The ones that the survey missed are clearly visible, form a distinct cluster with the features recorded, exhibit similar methods and material of construction, and seem to have artifacts from the same period in association.

Artifacts that the archeologists recorded around the dugout and the two houses include fragments of clear and aqua glass canning jars, "stoneware," "crockery," buckets, sanitary-seal cans, tobacco tins, an alarm clock, rubber, and lightning stoppers (presumably on the canning jars). A prehistoric rubble mound may also be present. One wonders whether it supplied building stone for the historic structures.

Based on the map location and verbal description, interviewees tentatively identified the site on Ellis Killen's homestead. Killen came from eastern New Mexico in 1931 with his wife and four children and filed on the land around the site (SF 063966). According to Killen's Final Proof testimony, the family settled on the land on June 17 and camped there while building a house. They planted five acres of beans every year, but harvested only in 1932 and 1933. They also kept 10 to 12 head of cattle and horses.

Most of the improvements listed were in Lot 1 of Section 4, thus corroborating interviewees in identifying DCA-83-480 with Ellis Killen. The improvements included a rock house, rock barn, and picket corral, all built in 1931; a rock storage house and another picket corral, built in 1932; a third picket corral, built in 1933; and a drilled well 73 feet deep with a pump and a dirt tank built in 1935. The Killens also had a fenced garden of one quarter acre at their homestead and five to 10 acres under cultivation in the SE/4 of the NE/4 of Section 4. They fenced part of their boundary with wire.

With one exception, the improvements described on the original survey report and also observed during the present project correspond to those listed in the Final Proof testimony. The exception, the small rock house observed but not listed in the testimony, was perhaps added later, as the Killens had two more children while they lived at the site.

In 1937, Ellis Killen received Patent 1088947. Five years later, on the day the Japanese attacked Pearl Harbor, Ellis Killen and his bachelor brother Joe were accused of attacking and killing two men in the main street of Quemado. To pay the resulting court costs, they sold their homesteads to the Hubbell Company. One or both were evidently convicted. Ellis Killen's family then left their homestead and moved away (interviews).

#### —DCA-83-487:

This site is located in the NW/4 of NW/4, Section 4, T.3N. R.16W. and dates sometime between 1929 and 1954. An ash pile and possible corral (a barren area of 8 by 12 m with two posts) near the section corner are its only features. Artifacts include a pepper can, a lid, and clear glass with an Owens Illinois trademark that dates to the period 1929-1954 (Moore et al. 1983).

The site is on Ellis Killen's homestead and could date to his tenure. It could also date to that of the Hubbell Company, either before Killen's entry or after. The site might have been, for example, the camp where Killen lived while he built his house (see DCA-83-480), or a camp of Hubbell's herders, perhaps for lambing, as it is in the Hubbell lambing grounds around Garcia Lake (see also OCA Location 2).

#### —DCA-83-488:

This homestead, in the NE/4 of SW/4, Section 31, T.4N. R.16W., dates sometime between 1900 and the 1930s. A one-room cabin, a root cellar, three corrals, a trash dump, and the wooden remains of a flat-bed truck or wagon make up the site (Moore et al. 1983).

In 1928, Alfred Lucero filed a homestead entry there (SF 057997). However, the entry number was transferred to a tract in a neighboring township the next year and Lucero may never have lived on the first tract.



In 1933, Chester F. Rohrer and his wife filed on the land, where they moved in May of 1934 according to the Final Proof testimony. They camped on the land while they built a "residence" and dugout in the SW/4 of Section 31. They also had a garden of one-quarter acre and a 15-acre field, where they planted corn and beans.

In 1935, they drilled a well 54 feet deep and installed a windmill; in 1936, they abandoned their first homesite for some reason and built a second one in the NW/4 of the section, where they installed a dirt tank and stock shed the same year. The location and features described for the first homesite suggest strongly that it is the same as DCA-83-488.

The Rohrers kept "several head" of stock on the land, to which Rohrer received the patent (Pat. 1099298) in 1937. In 1941, he evidently also received a permit to take coal from the land, and for a short time let people come onto his land to get it, presumably for a fee. The operation never amounted to much, however, and the permit expired in 1945 (USDI, BLM n.d.a; interviews).

#### ➡ DCA-83-489:

The site is located in the SE/4 of SE/4, Section 14, T.3N. R.17W., and dates between 1900 and the 1920s. It consists of a possible hearth and the remains of a wire corral. Artifacts include sardine cans, crimped seam cans, purple, natural, and amber glass, hole-in-top cans, a button, a harness snap, and a purple medicine bottle.

The site may be a herding camp associated with the Old Tejana Windmill nearby (Moore et al. 1983). The patent to the tract (Pat. 248247) was issued in 1912 to Joseph H. Nations, assignee of Emily A. Williams, widow of John S. Williams.

Williams had probably been one of the cowboys employed by Nations, and the land was assigned to Nations in payment of a debt. Probably Nations' cowboys left the trash, perhaps while guarding the well.

#### ➡ OCA Location 2:

The site is located in the SW/4 of SW/4, Section 32, T.4N. R.16W. and dates to the 1920s

or 1930s. A brush corral of 8 m diameter and a 4 m by 6 m tent base are its only features. Artifacts include tobacco tins, a vegetable can, and a whiskey bottle (Wozniak 1983:58).

The land is state land that the Hubbells would have leased by the time the site was used. The site, in fact, is near Garcia Lake, the Hubbell lambing grounds; therefore, Hubbell's herders may have used the site, perhaps during lambing.

Certain characteristics of the site are atypical of the Hubbell herders' camps as described in the previous historical chronicle: the tent is too big, and the herders ordinarily did not use corrals. These characteristics might be consistent with lambing, however.

Big sheep outfits needed extra herders for lambing during the early twentieth century because they used the "drop-bunch" method as described previously for David O. Garcia (see also Wallach 1981:56). The big tent on the site might have accommodated extra herders.

Many large outfits did not ordinarily use corrals even in drop-bunch lambing, but others like Garcia did. Perhaps the corral on this site served such a function. The site may instead have been a base camp for lambing, similar to those of Garcia, with the big tent for the cooks, some herders, the food, and the small corral for the meat supply, which consisted of old barren ewes marked for slaughter.

#### ➡ OCA Location 11:

This post-World War II site is located in the SW/4 of SW/4, Section 2, T.3N. R.17W. It consists of an ash pile and artifact scatter. The artifacts include a sheepherder's stove and stove pipe, a red-glass-bottle bottom, and enamelware pot, a canvas strap, a can, a roll of chicken wire, PCV pipe, a clear glass whiskey bottle, and pieces of a man's shoe.

The site is about a quarter of a mile northeast of new Tejana Windmill (Wozniak 1983:58). The land is state land and lies within the Hubbell outfit range. The site might have been a herding camp, perhaps used repeatedly to judge from the amount of trash. By the date assigned to it, however, the Hubbell outfit no longer hired herders, only fence riders who

stayed at the ranch headquarters near this site or in outlying camps.

→ **OCA Location 12 (Dipping Vat Windmill):**

This undated site is located in the NW/4 of NW/4, Section 36, T.4N. R. 17W. It consists of the windmill and a shed 2.5 m by 2.5 m with a corrugated metal roof (Wozniak 1983:58). Perhaps the shed was for spare parts or tools. The site is on state land. Presumably, it provided water for the Hubbell sheep-dipping vat.

**BLM San Augustine Coal Project  
Reconnaissance Transect Survey**

→ **Sites in Unit 202 (Section 17, T.2N. R. 17W.):**

Site 175 is a homestead in the NW/4 of NW/4 of the section that dates sometime between 1900 and 1920. It consists of a sandstone house, 6 m by 5 m; a rock-lined depression of a 2 m diameter, possibly a cistern or well; another 2 m by 2 m, rock-lined feature; and a 4 m by 3 m depression, perhaps a root cellar. Artifacts include cans, "china," and glass, some of which is pre-World War I purple.

Another homestead, Site 176 in the S/2 of NW/4 of the section, dates to the same period as Site 175. Its features are a sandstone house foundation, 6 m by 4 m, with a fireplace and a rock alignment of 12 m by 6 m with an attached 4 m by 2 m "knee high" sandstone structure.

Artifacts recorded during survey or observed on a later visit include lard cans, "soldered bottom" cans, purple glass, and aqua glass fragments of medicine bottles (CHAMBERLAIN'S COUGH MEDICINE and . . . /W/IZARD). Isolated occurrences 2-1 and 3-2, in the W/2 are brush-and-wire fences respectively 100 m and 200 m long along the edge of a low mesa top. They are probably two segments of a drift fence or corral.

The NW/4 of Section 17 was half of a homestead that also covered the NE/4 of Section 18 and belonged to Cosme Caro. In his Final Proof testimony, Caro said that he first settled on the land in 1913 with his wife and one child. He fenced the NW/4 of Section 17 and built a house of three or four rooms, a corral, a well, two small dams, and a barn. He also planted eight to 30 acres of corn, oats, beans,

pumpkins, and onions, but harvested crops in two years only. He grazed five to eight head of cattle on the land. He received a patent (Pat. 730762) in 1920. The list of Caro's improvements does not correspond very closely to the features recorded archeologically on either Site 175 or Site 176. Since no other homesteads were recorded in that quarter, however, one of the sites must have been his.

The other site may be one that interviewees recalled belonged to Eugenio Padilla or his stepmother, Maria Apodaca de Otero. Padilla ran cattle and homesteaded in the vicinity around 1916, where he had a rock house, "not very well built," and a corral that incorporated the rimrock of a small rincón into its walls (interviews). Maria Apodaca de Otero had a homestead in neighboring Section 8, patented (Pat. 468685) in 1915. Eugenio L. Padilla had filed on the E/2 of Section 17, where the drift fence is located, in 1918, three years after he had secured a patent (Pat. 468684) in Sections 20 and 21. The filing was cancelled in 1933. Padilla never proved up, but the cancellation was delayed because a patent on the land was erroneously issued to another person.

→ **Sites in Unit 189 (Section 8, T.2N. R. 17W.):**

Isolated Occurrence 1 is located in the SE/4 of the NW/4 of the section and may date to the period 1900-1920. It consists of a masonry chimney, a small, "A-frame" structure of juniper with its own collapsed masonry chimney, and a small earthen dam. Artifacts include a Dutch oven, crown cap, "crimped seam" can, and purple glass. The site was probably a herders' camp. The isolated chimney, especially, sounds like the "chimney corners" common to early twentieth century shepherds' camps elsewhere in New Mexico (Parish 1962:212); these were fireplaces that radiated heat into tents pitched in front of them in the era before portable sheet-metal "sheep herders' stoves" became common. The state selected the land in 1917.

Neighboring tracts belonged to Maria Apodaca de Otero (Pat. 468685, 1915) and her stepson Eugenio L. Padilla (entry 1918, canceled 1933), as discussed above, and to Aniceto Carrejo. The last landowner received the patent (Pat. 696078) to the E/2 of the SW/4 of the section in 1919.



Site 416 is an undated brush corral, in the SE/4 of the SW/4 of the section, in Carrejo's holding. It measures 8 m by 8 m and stands near, but not in, a prehistoric roomblock. The corral seems similar to the type that David O. Garcia and other sheep ranchers, both large and small, used during drop-bunch lambing in the late nineteenth and early twentieth centuries (Counselor and Counselor 1954:90-108; Velarde 1980). Several Hispanic families had lambing grounds in the general vicinity of these sites.

#### — Sites in Unit 164 (Section 33, T.3N. R.17W.):

A homesite (Site 180) and well (Isolated Occurrence 2) are located in the SE/4 of SW/4 of the section. The homesite may date between World War I and the 1930s. It consists of an L-shaped rock house, an ash pile, and four other masonry structures. Artifacts include white porcelain, a rubber shoe sole, a hoe blade, machine parts, and clear and purple glass. Anastasio Serna received the patent (Pat. 1023180) to the entire Section 33 in 1929. The site's date therefore coincides with his tenure.

According to his proof file, Serna first settled on the land in September of 1924 with his wife and nine children. He lived with a neighbor about a quarter of a mile away while he built a rock house in the SE/4 of the SW/4 of the section. This location corresponds to that of Site 180. He also built a pole corral there and ran two miles of wire fence. In 1925, he dug a well 85 feet deep in the same quarter-quarter (undoubtedly IO 2), cleared an acre of land, and constructed a dirt tank. In 1926, he cleared three more acres and hewed a water trough from a big log. He cultivated corn, beans, and oats, and also grazed stock on the land.

Around 1940, the section belonged to Valentin Baca's heirs. Presumably Baca had bought it during the 1930s. Since Baca raised sheep, five undated isolated brush corrals in this section recorded during survey or later visits may have belonged to him. The corrals include Site 178, NE/4 of SE/4, 11 m to 12 m in diameter; Site 179, SE/4 of SE/4, 10 m to 15 m diameter; Site 308, NE/4 of NW/4, same size as Site 179; Site 309, NE/4 of SW/4, "much like 308," and an unnumbered brush corral of

unrecorded size, SW/4 of SE/4. Like the corral at Unit 189, Site 416, these corrals resemble those commonly used for drop-bunch lambing. The entire homestead in Section 33 may have been part of a lambing grounds, with a centrally located base camp and well, and with several small corrals within a short distance of the base camp.

#### — Sites in Unit 190 (Section 9, T.2N. R.17W.):

The survey recorded three sites in this section. Site 182 is a rock house measuring 6 m by 3 m in the SW/4 of the NW/4 and dates between 1900 and 1920. An "artifact scatter" is included. Artifacts include a cartridge, a "soldered bottom" can, and purple glass. Site 184 is an undated brush corral with historic trash in the SE/4 of NE/4 near a small prehistoric masonry roomblock. Site 182 is on land that the state selected in 1919. Site 184 is on public domain near the boundary of a homestead patented (Pat. 1109800) in 1940 to Emilia Baca Chavez, widow of Valentin Baca. The Baca family had run sheep from winter through lambing in the general vicinity of this tract since the early 1900s. Site 184 was probably a shepherds' camp, perhaps one that the Bacas or related families used.

Site 186, in the SE/4 of the NE/4 on state land, is a prehistoric pithouse that also includes a cache of artifacts that date to the 1930s-1940s: a coffee grinder, Mason jar churn, and enamelware coffee cup, all in a metal foot locker. The nearest private land was originally patented to Emilia Baca Chavez. Before Mrs. Chavez's tenure, her land was part of the homestead entry (SF 020346) of Pascualita J. Eglicio, allowed in 1913 and canceled in 1919. The cache seem more likely to be associated with Mrs. Chavez's tenure than with that of Mrs. Eglicio.

#### — Site 400, Unit 61:

Situated in the SW/4 of SE/4, Section 22, T.4N. R.17W., the site consists of a lean-to and two rectangular corrals. One corral measures 10 m by 20 m. The other, 15 m by 15 m, also has an attached "jacal shed" (for corn or hay?). Trash consists of a scatter of crimped-seam cans. In 1935, Patent 1074082 was issued to Jake Eugene Taylor. Perhaps Taylor lived there alone (as the cans suggest) while building a house.

## Cultural Resources Indicated By Documents and Maps

### Homesites on Original General Land Office Survey Plats

The plats, dating between 1882 and 1884, cover the Homesteading Study Area and show the dwelling sites listed below. Further research on these and additional sites recorded on original survey plats of other SACA townships should include a check of the Surveyor General of New Mexico, Field Survey Notes for the appropriate townships, on file at the Bureau of Land Management, New Mexico State Office.

1. Ruins of a house. SW/4 of SW/4, Section 11, T.2N, R.17W. Township survey in May 1884 was paid for by settlers George Smith and Jose Ynes Esquibel.
2. Segura's. NW/4 of SE/4, Section 31, T.3N, R.18W., just east of Smith's Spring on the south side of Zuni Salt Lake maar. Survey of September and October 1882 was paid for by settler Andres Segura. He may have been one of the "Mexicans" who was mining salt from the lake by this time.
3. Patricio's. SE/4 of NE/4, Section 7, T.4N, R.15W., just west of a spring shown in Section 8. Survey of July 1882 was paid for by an unidentified settler.
4. Lucero's. SW/4 of NE/4, Section 2, T.4N, R.16W., just west of a spring shown in Section 1 (probably Hogeys Spring). Survey of August and September 1882 was paid for by Batiste Lucero.
5. Tafoya's. NE/4 of SW/4, Section 16, T.4N, R.17W. Survey of September 1882 was paid for by Luis Tafoya.

### Homesites Described in Homestead Case Files

The National Archives should have a case file for every homestead patent in the SACA, that, among other things, describes improvements on the homestead. The scope of this project did not permit the examination of all case files even in the Homesteading Study Area, but only those in which archeological surveys identified homesites contemporaneous with the patent.

A deeper search in these records would surely reveal much about many other homesites in the SACA.

Reproduction of each case file is very costly, however. Those obtained for this project averaged almost \$12 each.

### Roads and Trails

#### → Roads of 1882-1900:

The original survey plats of the townships in the Homesteading Study Area show only the three roads (Figure 3.1) that Herrick (1900:map facing p. 338) observed in December of 1899. These are the only roads or trails that Herrick shows inside the Homesteading Study Area. Herrick also illustrates roads and trails in the rest of SACA.

The roads inside the Homesteading Study Area are the following:

1. A road (No. 1) from the south side of Zuni Salt Lake maar northeast up Nations Draw and French's Arroyo to a pond east of Cerro Prieto. Herrick shows that this road continues north-northeastward to El Morro, probably up Puertocito Draw west of Cerro Blanco. It is one of only three routes over the rim as late as the 1930s, according to local residents (see Resources Indicated by Interviews below).
2. A road (No. 2) from the north side of Zuni Salt Lake maar southeast to the Largo and toward Rito Quemado.
3. A road along the east side of Tejana Mesa running northward through T.4N, R.17W. between Sections 36 and 4. The original survey plats show this road as two unconnected segments, but Herrick connects them. This route is the second of the three routes over the rim that local people recalled from the "old days."

Routes that Herrick shows outside the Homesteading Study Area include the more westerly of the two Zuni Salt Trails (see Chapter 2), an extension of Road 1 listed above from the Homesteading Study Area southwestward to the state line, and extensions of Road 2 from the Homesteading Study Area southeastward to Rito Quemado and westward down the Carrizo Wash toward St. Johns.



### → Stock Driveway:

The Catron County plats of ca. 1940 show a driveway in T.2N. R.18W. running north and south through the E/2 of Sections 3, 10, 15, 22, 27, and 34. It extends into T.3N. R.18W. near Zuni Salt Lake, where it covers the N/2 of N/2, S/2 of NE/4, SE/4 of Section 29, and the N/2 of Section 30, and the SW/4 of Section 28.

### Cemeteries and Graves

USGS 7.5-minute quadrangle maps show one cemetery in the Homesteading Study Area and another near Zuni Salt Lake. A systematic check of all quads covering SACA would undoubtedly reveal more.

1. Zuni Salt Lake Cemetery. NW/4 of NW/4, Section 30, T.3N. R.18W. The site is north of the Zuni Salt Lake maar, and may be on BLM land (see Zuni Salt Lake quad).

2. Nicholas Spring Cemetery. NW/4, Section 29, T.4N. R.18W. The site is south of Nicholas Spring on land patented to Nicholas Padilla in 1918 (Pat. 868955) or his heirs in 1923 (Pat. 894246). It may be a family cemetery (see Fence Lake SW quad).

### Cultural Resources Indicated by Interviews

#### Dwelling Sites

##### → Huning Cabin:

Located somewhere west of Zuni Salt Lake off the road to St. Johns, this site is reportedly old (interviews). The three Huning brothers originally came to New Mexico from Germany. The eldest, Franz, came first in the late 1850s. Before the railroad arrived in the New Mexico Territory, they established a mercantile company with headquarters in Albuquerque. They freighted goods by oxen, and later by mule team, from Kansas to Albuquerque and, later, to Los Lunas, then to Army posts in Arizona as far west as Fort Whipple.

By about 1880, the two younger brothers, Louis and Henry, were wintering 60,000 to 80,000 head of sheep along the New Mexico-Arizona border and summering them in the White Mountains of Arizona. In 1881, Henry

Huning bought a half interest in a ranch at Showlow from Corydon E. Cooley, a pioneer settler among the White Mountain Apaches. Four years later, Henry and Louis split the ranch along the border. Henry took the Arizona side and Louis the New Mexico side.

In addition to the Showlow ranch, Henry operated a big store in Showlow with Cooley until 1890, when they dissolved their partnership and sold the ranch to the Mormon W. J. Flake. Louis Huning continued to run sheep along the border in New Mexico until the end of the century, when economic depression forced him to sell out (Granger 1960:402; McGuire 1980; Wentworth 1948:239-240; Winter 1984:10). The Huning Cabin is a line shack that may date to either the joint tenure of Louis and Henry or to Louis's tenure after he split with Henry.

##### → Moreno Homesite:

The Moreno family had a home at Moreno Spring (NW/4 of NW/4, Section 8, T.4N. R.18W.) during the 1890s (interviews). The land is not patented and the name Moreno does not appear in the land records for the Homesteading Study Area.

##### → Nations Ranch Headquarters:

The site is in the middle of the NW/4, Section 35, T.4N. R.17W., and dates from around 1910. It is still used as the headquarters of the Hubbell Ranch. The ranch house originally housed Nations' overseer, Shepard Casey, and various employees. The old part of the house is the western half, a row of rooms with walls two adobes thick that opened eastward onto a porch. The porch has since been converted to another row of rooms. Outside is a big boulder where visitors and residents have carved their names, including the Nations' cowboy "Uncle" Nat Kellogg and oil exploration crews. Two log outbuildings, now stuccoed, also date to the Nations' period (interviews).

The site is located on the homestead entry that Shepard Casey filed in 1906. In his Final Proof testimony of 1914, Casey numbered among his improvements a seven-room stone and log house (presumably the ranch house that interviewees described as adobe); a blacksmith shop; a garage; a warehouse for the storage of engines, windmills, hides, and pelts; a one-

room outbuilding; a 50-foot well with a windmill; and a dirt tank. He kept as many as eight hogs and 300 chickens and turkeys on the premises, where he also had an alfalfa field.

#### —Salty John Cox Cabin:

The first permanent home of Salty John Cox after he came to the Zuni Salt Lake country in 1909 was near Slash K Windmill (SW/4 of NE/4, Section 3, T.2N. R.18W.). He lived in this cabin until he took over the Kemp place, perhaps in the 1920s (interviews; see below). John Cox had a homestead in Sections 3 and 4, T.2N. R.18W., Patent 747241, 1920 (first application, 1910), where this site is undoubtedly located. He filed on more land in the same two sections in 1921 (SF 031628, canceled 1926) and 1931 (SF 061907, relinquished 1936).

#### —Antonio Jose Candelaria Homesite:

In 1932, when Emilio Lusero first settled at a homestead in Section 10, T.4N. R.17W., below the rim, he found an old man, named Antonio Jose Candelaria, living next to his place. He remembered going with his mother (who died in 1915) as a child to visit Mr. Candelaria (interviews).

In 1913, Antonio Jose Candelaria received a patent (Pat. 343724) to 160 acres, including the NE/4 of the SE/4 of Section 9. His house would be somewhere in this tract.

#### —David Martinez Homesite:

On a hillside, in the SE/4 of NE/4, Section 9, T.4N. R.17W., between a large, ridge-top Anasazi ruin and Laguna Larga stands a rock house with a corner fireplace, niche, and the much admired architectural embellishment of long sandstone slabs set upright in the front wall flanking the window. On a tour of the area, Mr. Louis Martinez identified the house as that of his father's grandfather, David Martinez of Atarque, who received a patent to 640 acres in Sections 9 and 10 of T.4N. R.17W., in 1923 (Pat. 909545). David Martinez ran cattle up the drainage to the northeast, where his son later homesteaded (Chapter 4, Site 485).

#### —Santiago and Juanita Chavez Ranch:

Santiago Chavez and his wife, Juanita, maintained a small herd of goats on a little ranch near Zuni Salt Lake before World War I. The

Hubbell Company owns the land now. In 1915, a young nephew came to herd the goats for them or serve as a "scarecrow" to keep the coyotes away. In the evening, the dogs herded the goats back home, where they watered at a little lake nearby. The next year, the little boy attended the school at Salt Lake. Juanita Chavez made goat cheese and sold it in Quemado. The couple also had a place above the rim near Atarque.

#### —Henry Coleman Homesite:

The approximate location of this site is the SW/4 of SE/4, Section 20, T.2N. R.16W. Coleman and his wife ran horses and cattle here before separating in 1917. Although no evidence of the Coleman house may remain (interviews), they built one with two rooms and walls of cedar pickets (Johnston 1983:22-23). They also had two wells pumped by one windmill. They sold the property to Tom Curtis and a man named Reckord, who had a windmill, corrals, and buildings for a cattle camp there. Curtis and Reckord ran their cattle at the south end of the Tejana Mesa top, where the only water was in natural cisterns (interviews).

#### —Grover Powell Homesite:

In 1916, Grover Powell left Amarillo, Texas, to take up a homestead southwest of Cerro Techado. He built a house in the SE/4 of SE/4, Section 35, T.4N. R.15W. and ran cattle there and on unfenced land in the North Plains. The family also kept about eight milk cows and sold the dairy products. Although the family hauled water from a well of Nations nearby (they would sneak in at night to avoid Nations' guards) at first, they later dug their own well, hitting water only after giving up on two dry holes (interviews).

Powell received a patent to the land in 1924 (Pat. 938566). By 1940, he had acquired land in two neighboring sections and in two sections a few miles west. Part of the original Powell house has been incorporated into the house of the present landowners (interviews).

#### —Ratliffe Place:

The Ratliffes arrived in 1916 or 1917. Their homesite is north of Hubbell Draw and Twin Windmills (interviews). In 1923, Eliza Ratliffe received the patent (Pat. 907894) to the E/2 of NE/4, E/2 of SE/4, and SE/4 of Section 34,



T.4N. R.15W. The homesite would be somewhere inside this tract.

#### ➤ **Simplicio Garcia Homesite:**

Simplicio Garcia had a house within sight of the present "Bert Cow ranch house" around 1917 in the NW/4 of NW/4, Section 28, T.4N. R.17W. (interviews). The patent (Pat. 841119) to the land was issued to Aniceto Gonzales, Garcia's father-in-law, in 1922. Originally from Atarque, Gonzales also held a patent (Pat. 907198) to more land in the same sections as the earlier patent, Sections 21 and 28. Garcia received a patent (Pat. 871248) in 1922 for land in Sections 3 and 18 of the township. Another son-in-law of Aniceto Gonzales, Juan Cardozo, lived nearby and received patents in Sections 18, 19, and 20 in 1923 (Pat. 899624) and 1929 (Pat. 1027608). These holdings indicate roughly the extent of the range of these men, who may have run stock together. They reportedly did not disdain to pick up a stray cow belonging to Nations, put it in a wagon, and haul it home.

By the 1930s, another resident at this site, reportedly in the present "Bert Cox ranch house" itself, was Preciliana Chavez. She must have been a relative or in-law of Gonzales, Garcia, or Cardozo. Originally from Atarque, she had previously homesteaded one township west near Old Santa Rita Springs, where in 1911 she received a patent in Sections 21, 22, 27, and 28, T.4N. R.18W.

By 1940, Bert Cox had bought land around these holdings and part of Cardozo's land. Later he bought more, including this homesite.

#### ➤ **John Graham Homesite:**

John Graham came to the country around 1917 and homesteaded alone (interviews). Not until 1928 did he receive a patent to all of Section 35, T.4N. R.16W. (Pat. 1014593). The homesite is in this section, perhaps in the SE/4 of the SW/4. The next year, Graham sold the land to the Frank A. Hubbell Company (Catron County Clerk's Office ca. 1940). Graham had a store in Quemado around 1930 (DeWitt and Wilson 1977).

#### ➤ **Joseph Cates Cabin:**

The Cates family built a cabin (probably in the NW/4 of Section 12, T.4N. R.16W.) below the

rim west of a property later called "the Old Black Place" (Chapter 4, Site 271). The Cateses raised cattle. Their cabin may still be standing (interviews).

Not long after the Stock Raising Homestead Act, Joseph B. Cates must have filed on land in Sections 1 and 12, T.4N. R.16W. around the cabin; he received a patent (Pat. 911209) in 1923. Although the tract contained 640 acres, he applied in 1917 for a second homestead (SF 033733) in Section 12, T.4N. R.15W., and Sections 6 and 7, T.4N. R.15W. His address at the time was St. Petersburg, Texas.

This second entry was not allowed until 1922 because of its irregularity; Cates relinquished it two years later. In 1927, he filed on the same tract again, using an address in Magdalena. He relinquished this entry in 1931. He may have sold the patented land to Annie Whitley or her daughter and son-in-law, the Blacks. Annie Whitley filed on the relinquished homestead in 1933, and the Blacks later owned both the patented land and the relinquishment that Annie Whitley patented (interviews; see Chapter 4, Site 271).

#### ➤ **Pascual Chavez Homesite:**

Pascual Chavez, probably of Atarque, built a house north of Cerro Prieto. He received a patent (Pat. 1104246) to the SW/4 of NE/4, W/2 of SE/4, Section 7; Lots 2, 3, E/2 of NW/4, W/2 of NE/4, SE/4 of NE/4, N/2 of SE/4, NE/4 of SW/4, Section 18, T.4N. R.16W.; and SE/4 of NE/4, E/2 of SE/4, Section 13, T.4N. R.17W. The original patent was issued in 1939, but evidently Chavez filed the original entry in 1920 (Catron County Clerk's Office ca. 1940). By around 1940, Chavez also owned land in several neighboring sections.

#### ➤ **Buckner Homesite:**

In the early 1920s, the Buckners built their house (probably of wood) on a prehistoric ruin in Section 10, T.3N. R.15W. They wanted to use the building stones for their chimney, and the site was sheltered from the wind. They also had a cornfield downhill from the house (interviews).

#### ➤ **Tom Ogle Homesite:**

Tom Ogle worked for Nations. He homesteaded near Hogeys Spring and built a house

in the SW/4 of Section 3 or NW/4 of Section 10, T.4N. R.16W. Perhaps Nations got Ogle to file for this homestead so that he could guard the spring (interviews). Ogle filed SF 044908 in Sections 3 and 10, T.4N. R.16W., in 1922 and relinquished it in 1927.

#### —Gus Klinkman Homesite:

Around 1924, Gus Klinkman built a house in the SE/4 of SE/4, Section 16, T.4N. R.16W. (interviews). August Jacob Klinkman received Patent 1024586 in 1929 to the S/2 of Section 15, NE/4 of Section 21, and the NW/4 of Section 22, T.4N. R.16W. The location above, given by interviewees, may therefore be slightly west of the actual location. Section 16 is, of course, a state school section. Klinkman was still there around 1940.

#### —Wilbur Wadley Homesite:

Wilbur Wadley was another Nations employee. He had a place at Sweazea Lake (Section 10, T.1N. R.15W., near the original site of Rito Quemado). He sold it and moved to a homestead in French's Arroyo, where he built a log cabin in the SW/4 of SW/4, Section 10, T.4N. R.16W. Wadley received Patent 1038856 for the land around this site in 1930, so he must have filed around 1925, when Nations was going under. He is thus one of the homesteaders who moved into the vacuum that Nations left. The present owner arranged to buy the property from Wadley's widow in 1942 and lived in the cabin for about 15 years until he built his present house right next to it (interviews).

#### —Salty John Cox-Kemp Place:

John Cox moved from near the Slash K Windmill to the Kemp place, where he built a house near Cox Ranch Pueblo (Section 23, T.2N. R.19W.). In 1921, Ben Kemp received Patent 800330 in Section 19, T.2N. R.18W., and Sections 24 and 25, T.2N. R.19W. Two other members of the Kemp family filed on land in Sections 26 and 35, T.2N. R.18W., in 1918 (SF 031213 and 031214). Both entries were canceled in 1923.

Perhaps John Cox took over the Kemp holdings around this time. He still owned a half interest (with Harris Miller) in the Ben Kemp land in 1940, but sold his holdings in 1947 (Pioneers Foundation, Inc. n.d.).

#### —Hubbell Line Camps:

After taking over the Nations and Garcia holdings in 1925-1926, the Hubbell outfit maintained several line camps for caporales and, after World War II, fence riders. Most of these camps were outside SACA. One that might have been inside SACA was a rock house below Zuni Salt Lake, possibly near Morelos (Section 5, T.3N. R.19W.).

#### —Reeve Beckwith Homesite:

Beckwith was a homesteader who reportedly bootlegged on the side. His house is located somewhere in the S/2 of SE/4, Section 4, T.4N. R.16W. (interviews). In 1927, he filed on Lots 7, 8, 9, 10, 11, and 12, S/2 of Section 4, and W/2 of NW/4, Section 9, T.4N. R.16W. (SF 056699). He relinquished in 1933 to J. C. Simpson.

#### —Celi Chavez Homestead:

The present Montano place (NW/4 of NE/4, Section 7, T.4N. R.16W.) was originally homesteaded by Celi Chavez around 1928. His brother, Pascual, had a homestead nearby (interviews). Celedonio Chavez received Patent 1083256 in 1936 to the land around the site and Patent 1109013 to more land in the same and neighboring sections in 1940.

#### —Bert Cox Line Camp and Horse Pasture:

The site is shown as an abandoned structure on the USGS Fence Lake SW 7.5 minute quad in the NE/4 of NW/4, Section 8, T.4N. R.18W. During field work for this project, a standing one-room log cabin with a tin roof, a pole-and-brush corral of roughly 10 m diameter, a pile of extra notched logs beside the cabin, and a large area of charcoal bits were observed.

Artifacts found both inside and outside the cabin consist mainly of cans, most of the sanitary type but some of the older hole-in-top, style. In the roof of the cabin, someone has cut a hole for a four-inch stovepipe; a matching piece of tin on the ground in front of the cabin is hardly weathered.

On a visit to this site, rancher Tom Cox recalled that his father, Bert, built the cabin as a line shack for his cowboys, who used the area when they were weaning calves. The cowboys slept in the shack, but cooked and kept



the chuck box outside, presumably because weaning occurs in warm weather when cooking inside would have made the cabin unbearably hot. The cowboys kept their remuda in the adjoining fenced pasture, which extended into Section 5. The land is public domain and no record of a homestead entry there has surfaced.

Another interviewee remembered Bert Cox saying that the cabin had been a schoolhouse. Possibly it had served that purpose at another location, and Bert Cox had salvaged it for his line shack. Such reuse could explain the pile of extra logs beside the cabin. The fresh look of the piece cut from the roof and the fact that the cowboys cooked outside suggest that a stove was installed (or planned) later for still another episode of use.

#### — Old Jose Tapia House:

The house is about two miles north of, and visible from, the Zuni Salt Lake road (N.M. Route 32), possibly near Tapia Well (NE/4, Section 25, T.3N. R.18W.). The land on which Tapia Well is situated was patented (Pat. 1013976) in 1928 to Monico Griego. The rest of the section was patented in 1921 to Manuel Escajedo (Pat. 810594) and in 1922 to Ambrosio Gonzales (Pat. 587599). The Tapias and Provenchers intermarried, evidently beginning in the 1920s, when Edward Provencher's widow married Jose Tapia. By 1940 this section belonged to a Provencher. Neighboring sections in a strip along the east side of T.3N. R.18W., and the west of T.3N. R.17W. were patented to various Provenchers or Tapias beginning with Margarito Provencher, son of Edward, in 1915 on a tract near Garcia Spring (Pat. 473632). The patents of the Tapia Well section and dates of the Tapia marriages to Provenchers suggest that the house might date to the late 1920s or 1930s. By 1940, the Hubbell Company had bought some of this land outside the Tapia Well section.

#### — Tommy Thompson Homesite:

Around 1930, when Tommy Thompson settled in the W/2 of NW/4, Section 8, T.3N. R.17W., near Garcia Spring, he noticed the remains of an earlier homesite there (interviews). Thompson received a patent (Pat. 1094764) to the W/2 of W/2 and NE/4 of SW/4, Section 8

(as well as land in Section 7) in 1937. The earlier homestead might be associated with the American Valley entry there in 1883 (Number 1604, canceled 1886) in the NE/4 of NW/4 and NW/4 of NE/4 of Section 8. The site is more likely associated with entry 8130, however, in the N/2 and SE/4 of NW/4, Section 8, filed in 1904 and relinquished in 1907.

#### — Lawrence Brown Homestead:

Mr. and Mrs. Lawrence Brown recall filing on land in the upper Nations Draw in 1931. They built a house, still occupied, in the NW/4 of SE/4, Section 27, T.4N. R.16W. They also had a cornfield. Mr. Brown received the patent (Pat. 1084985) in 1936. Near the Browns' house someone had started a rock house earlier, part dugout, but had not finished it. The Browns also found big rifle hulls, without identifying names or numbers, all around their house. They speculated that some sort of battle was fought on the site years before.

The partly completed house could be a relic of Joseph C. Burget of El Paso, Texas, Salt Lake, New Mexico, and Giley (?), California, who filed on the land in 1919 (SF 038510). The General Land Office canceled his entry after the five-year notice was twice returned undelivered. One is tempted to speculate that Burget, with his El Paso origin and his entry so near Nations' Single Mill Well (SE/4 of NW/4, Section 26), was one of the famous Nations' gunslingers who guarded the wells. A flaw in this argument is that the tract around the well itself was evidently open in 1919; the earliest entry there dates to 1922 (SF 043656).

Someone might have squatted there before the entry, or the land might have been designated for state selection and then not selected. The 1922 homesteader, an ex-soldier from Texas named Robert Locke (name is not fully legible on the records), relinquished in 1925. Since his tenure coincides with the end of Nations' tenure, one might suspect him of being another Nations' cowboy-proxy.

#### — Bud Lee Cabin:

The cabin, which may postdate that of Nations, still stands west of Single Mill Well in the SW/4 of NW/4, Section 26, T.4N. R.16W. Bud Lee was a nephew of Frank and Bill Lee, two World War I-era homesteaders (see Chapter 4, Site

465) and a cousin of Reuben Wright, whose possible homesite near Cottonwood Spring (Hogeye Mountain) in the early 1930s was discussed above (see Sites Recorded by Previous Archeological Projects, DCA-83-299). All these men had homesteads in the same general area (interviews).

According to one interviewee, Bud Lee built the cabin in the 1920s and left in the early 1930s. According to others, the cabin was originally built at Site 465 by Bill Lee (on land patented in 1923); Bud moved it to its present location later. Bud Lee filed entry SF 063811 in 1931 and relinquished it in 1934.

When Bud Lee left, Mrs. Cameron took over his place (interviews). This would be Hettie Cameron, who received Patent 1110691 on Bud Lee's former entry in 1941 and thus presumably bought his relinquishment. The cabin was evidently abandoned by 1950, when a neighbor moved some building material from it to her home, still occupied (interviews).

#### ➔ John Henning Cellar:

A cellar, reputedly old, is on the former homestead entry of John Henning (SF 062757) filed in 1930 and relinquished in 1934. The entry covers Lots 2-8, 10-12, Section 6, T.4N. R.15W. Whether the cellar dates from Henning's tenure or an earlier time is unclear (interviews).

#### ➔ Webb Homesite:

The Webb homesite was a short distance west-southwest of the present Bert Cox ranch house in the NW/4 of Section 29, T.4N. R.17W. Bert Cox bought the Webbs out with money and a pressure cooker that they coveted (interviews). Tom Henderson Webb filed on the W/2 of Section 29, T.4N. R.17W., in 1933 (ST 066852).

The entry was canceled the next year. The land was not patented until a public sale in 1959. Possibly Bert Cox was prevented from filing on the tract by the administrative freeze on homestead entries that followed the Taylor Grazing Act

#### ➔ George Wheeler Homesite:

The George Wheeler homesite appears on the USGS Cerro Prieto 7.5 minute quad (1972) as an occupied site in the NE/4 of NW/4, Section

6, T.3N. R.16W. It is now abandoned (interviews). In 1939, George Wheeler received Patent 1104121 to all of Section 6.

#### ➔ Repasz Homesite:

The Repasz family had a homesite somewhere in the Mangum Ranch (Mesa Tinaja) vicinity south of Nations Draw during the 1930s (interviews). In 1940, Howard F. Repasz received Patent 1106912 to all of Section 7, T.3N. R.16W.

#### ➔ Nona Killen Moore Homesite:

Nona Killen Moore, a sister of Ellis and Joe Killen (see Sites Recorded by Previous Archeological Projects, DCA-83-480 above and Chapter 4, Site 497) shared a homestead with their parents. Evidence of the homesite, at least trash, still survives (interviews).

Nona Killen Moore received Patent 1111424 in 1941, having evidently acquired, in 1934, the relinquishment of Mary J. Killen (her mother?) who originally filed on the land in 1932 (SF 065840).

#### ➔ Ida Wood Homesite:

The approximate location of this site is in Section 29, T.4N. R.15W., near the Davis property (SE/4 of SE/4, Section 24, T.4N. R.16W.) (interviews). Ida Wood received Patent 1107781 to all of Section 29 in 1940.

#### Camps and Other Range-Use Sites

##### ➔ Cattle Pasture on Tejana Mesa:

Nations used the top of Tejana Mesa as a pasture for some Mexican longhorns, where extra hands rounded them up in the fall of 1917 (Johnston 1983:91). He may well have used the mesa as a pasture in other years too. Whether any physical remains of this use survive is unknown.

##### ➔ Horse Pasture:

Nations had a horse pasture near Garcia Lake, perhaps in the N/2 of Section 4, T.3N. R.16W., or possibly in Section 32, T.4N. R.16W. A vengeful Henry Coleman once cut the wire between every pair of posts to let the horses out. The site seems to have been on Ellis Killen's 1930s homestead (Section 4), for Killen later took the wire, twisted it back together again, and used it (interviews).



#### → Drift Fence:

Joseph Cates built a drift fence, probably of stacked logs and brush, approximately along the northern boundary of his homestead (Section 12, T.4N. R.16W.) below the rim.

The fence was supposed to keep cattle from going up on the rim and may still be visible (interviews). Cates lived on the land between about 1917 and 1931.

#### → Shearing Camp:

For a few years after World War II, the Hubbell Company sheared sheep east of Cerro Prieto near Cerro Prieto Windmill (NE/4 of Section 19, T.4N. R.16W.) (interviews). Whether any physical evidence of this activity remains is unknown.

#### Watering Places

When people mentioned watering places, especially old, dependable windmills, during interviews, they often recalled them warmly. This attitude may be common among stock raisers and farmers in dry country.

#### → Dam on Largo:

In December of 1899, Herrick passed El Porticito (SW/4 of SE/4, Section 13, T.2N. R.17W.), which he described as follows:

About eight miles down the valley from Rito Quemado the valley has at some time been dammed by a flow of basalt which extends both to the east and the west in an extensive sheet.

The stream has cut for itself a narrow passage through the dyke, and here is the site for a large reservoir that would irrigate an extensive region below (Herrick 1900:342).

Five years later, according to Mr. Eliseo Baca, whose father was one of the Baca brothers previously mentioned, his grandfather had seen the same potential in the spot and built a dam there.

The arroyo was not there then, only nice vegas downstream. After five dry years, however, the arroyo cut through the spillways and dumped silt all over the vegas and ruined them.

#### → Jeremillas Lake:

Mr. Baca's grandfather also built the dam that formed Jeremillas Lake in Section 29, T.3N. R.17W. about the same time. In 1909, Jeremiah Gonzales filed homestead entry SF 012063 on the tract, but relinquished it in 1912; the land later belonged to Valentin Baca.

#### → Leyba Spring:

Mr. Baca's grandfather also used, and possibly improved, Leyba Spring in the NE/4 of Section 13, T.2N. R.17W. Patent 398166 was issued in 1914 to Sabino Leiva for the land around the spring.

#### → Laguna Escondida:

Anastasio Baca built a dike to divert water from a nearby arroyo into this basin (SW/4, Section 15, T.2N. R.17W.). In 1920, his herd lambed there. He or his brother, Valentin, probably used the land around the lake for lambing in other years also. The patent (Pat. 191940) was issued in 1911 to Antonio Garcia, a relative or in-law (interviews). The lake is now dry.

#### → Maria Apodaca de Otero Well:

At 108 feet, the well on Maria Apodaca de Otero's homestead (W/2 of NW/4 or NW/4 of SW/4, Section 8, T.2N. R.17W.) was the deepest one dug by hand in this country (interviews). Maria Apodaca de Otero received a patent (Pat. 468685) in 1915. The well probably dates from around the time she filed on the land, 1910 at the latest.

#### → Nations' Windmills:

Nations had pairs of windmills installed at his wells, so that if one broke down, water could still be pumped. (See the Historical Chronicle above for land-tenure date.) Moving upstream, these wells were the following:

1. Largo Wells, about 10 miles below the Nations' ranch headquarters near Zuni Salt Lake, possibly on Berdell Carter's entry, SE/4 of SW/4, S/2 of SE/4, and NW/4 of SE/4, Section 9, T.3N. R.18W.
2. Carter Well in NE/4 of NE/4 of Section 9 reportedly dates to 1915. See also Old Rito Well below.

3. Headquarters Well, NW/4, Section 35, T.4N. R.17W., may date as early as 1906.

4. Old Tejana Well (Papalotes Cuates--Twin Windmills), SE/4 of SE/4, Section 14, T.3N. R.17W., probably dates to 1912 or earlier.

5. Cerro Prieto Well, NE/4, Section 19, T.4N. R.16W., may date as early as 1907 or 1908.

6. Single Mill, SE/4 of NW/4, Section 26, T.4N. R.16W.

7. Picket Corral Well, SW/4 of SW/4, Section 1, T.3N. R.16W.

8. Double Mills, SE/4 of SE/4, Section 4, T.3N. R.15W.

9. Techado Well, somewhere around the base of Cerro Techado.

10. Horse Camp Well, probably NW/4 of SW/4, Section 31, T.4N. R.14W.

#### → Finch Well:

Homesteaders hired John Albert Finch to drill wells (interviews). Presumably he drilled this one (SE/4 of SW/4, Section 18, T.2N. R.17W.) for himself. He received Patent 819626 for the land in 1921.

#### → Old Rito Well:

This well, in the SW/4 of SW/4, Section 14, T.3N. R.18W., might owe its name to the Rito Land and Cattle Company, which was tied up with Nations until at least 1915. Perhaps it is the same as Largo Wells (see above).

#### → Jerry Well:

The Jerry is a comparatively "new" well that the Hubbell Company drilled in the SW/4 of NE/4, Section 22, T.3N. R.18W. by 1946, perhaps in the 1930s (interviews).

#### → Garcia Spring:

Improvements on this spring in the NE/4 of NW/4, Section 8, T.3N. R.17W., are relatively recent and evidently made by the Hubbell Company; therefore, they would postdate 1926, when Hubbell acquired the land. The

spring was among the first water sources homesteaded (in 1882) and has attracted settlers ever since. It is named for David O. Garcia (see Historical Chronicle above; interviews).

#### Roads and Trails

In the "old days" (before World War II), one could negotiate the rim in a wagon or motor vehicle in only three places (interviews). Two of these routes (1 and 3 below) seem to correspond to routes on the original 1882-1884 township survey plats and Herrick's (1900) map mentioned above (see Resources Indicated by Documents).

1. At Cerro Blanco, probably a road shown on USGS Techado 7.5 minute quad down Puertocito Draw through Section 34, T.5N. R.16W. This road may correspond to Herrick's route between El Morro and Zuni Salt Lake.

2. At Techado through Lethart Canyon, where the present N.M. Route 36 now passes. This route is actually just east of SACA.

3. Past the Bert Cox Ranch house, probably a road shown on the USGS Cerro Prieto and Fence Lake SW 7.5 minute quad that runs through Section 33, T.5N. R.17W., to Fence Lake. This road may correspond to Herrick's route from the east side of Tejana Mesa northward. It may also be the same as the "American Valley Road" that Fewkes (1891) shows running south from near the Zuni farming village of Pescado. It was the old road to Gallup, and may have been used during the 1880s by troops traveling from Fort Wingate to fight the Chiricahuas (interviews).

#### Public or Community Sites

##### → Zuni Salt Lake Community:

The community is located in Sections 30 and 31, T.3N. R.18W. In 1888, Frank Hubbell built a store on the south side of Zuni Salt Lake, where he had a homestead (interviews). The store building was later moved to the north side of the lake, where it still stands in a cluster of other abandoned buildings. A post office operated between 1902 and 1940 (Pearce 1965:140). The Hubbell store at the north end of the lake, an adobe building, stopped functioning as such shortly after 1920; by



1923 it sold only salt, and around 1926 it closed. A school was also in operation by 1916 and was still functioning in 1930. Newt Curtis built a rock house nearby about 1930, and presumably used the Hubbell store as his salt warehouse (interviews; field observation).

#### ►Techado Community:

On the west side of N.M. Route 117 in the NE/4 of SE/4, Section 10, T.4N. R.15W., stands a cluster of buildings that was once part of the Techado Community. Members of the Moore family originally homesteaded the surrounding land. The family included father Hugh and three sons, Bob, Largus, and Bill. All had entries in T.4N. R.15W. among the railroad sections around Techado: Hugh in Section 9, patented (Pat. 924587) in 1923; Bob in Section 10, patented (Pat. 914579) the same year; Bill in Section 27 (SF 033374), allowed in 1918 and canceled in 1924; and Largus in Sections 7, 17, and 18, patented (Pat. 1091052) in 1937.

Also recorded are Mrs. Mattie Moore, whose patent (Pat. 894252) in Section 14 dates to 1923, and L. Jay Moore, who filed on Section 29 (SF 061209) in 1930 and relinquished in 1933. Interviewees did not know whether these Moores were related to Leroy O. Moore, a dealer in railroad land scrip whose entry in Section 6 of T.3N. R.17W. (Pat. 649789) was patented in 1918, the year of his death, and sold by his estate to the Hubbell Company (Catron County Clerk's Office 1921-1978). The buildings in the cluster are on Bob Moore's land, although the father, Hugh, reportedly inhabited a big log house that was part of the grouping until it burned. Several log outbuildings also belonged to him. A large standing log building, now used as a barn by current inhabitants of the site and clearly visible from N.M. Route 117 was once a store, post office and dance hall (interviews).

The Techado (or Trechado) post office operated 1924 and 1947, but not always at this location (Pearce 1965:169; interviews). According to rancher Jim Hogg, the first post office was in a log building several miles southeast just west of Cerro Techado, for which it was supposed to be named (but the U.S. Postal Service for some reason inserted an "r"). Later, during the 1930s or early 1940s, Bob Moore assumed the

postmastership and set up the post office in the big log building. Still later, others took on the responsibility and adapted buildings of their own for use as the post office. In all, the post office operated from seven or eight different locations. It moved so often that Techado people said it should be put on wheels. Finally, no one wanted it. By that time, 90 percent of the people had moved away, so the post office closed (interviews).

The Techado community also had a school house in the 1930s, but it was never on the Moore homestead. It was first located about a quarter of a mile from the original post office west of Cerro Techado, but was later moved to a spot southeast near Adams Diggings, from which it has been moved (interviews).

#### ►Midway School:

Nona Killen Moore taught at the Midway School in Section 19 or 20, T.3N. R.15W. The school was probably like most other homesteaders' schools since it operated for only a few years during the 1930s. The building evidently still stands (interviews).

#### ►Myers School:

A school for children of Fence Lake homesteaders on top of Santa Rita Mesa was situated on the Myers homestead (interviews). In 1935, C. Ernest Myers received Patent 1079363 for the N/2 of Sections 3 and 4, T.4N. R.18W. The next year, James A. Myers received Patent 1087129 for the S/2 of Section 4 and the SW/4 and N/2 of SE/4 of Section 3. The school was situated in the SE/4 of the SE/4 of Section 4, T.4N. R.18W and is shown as an abandoned structure on the USGS 7.5-minute Fence Lake quadrangle map. All that remains is a shake roof sitting in the ground. The walls, recently salvaged, were of logs laid horizontally.

#### ►Miscellaneous Cultural Resources:

Petroglyphs located in the NE/4 of the NE/4, Section 3, T.4N. R.17W., are on the northern boundary of the section on the west side of a drainage. Inscriptions include "JRX", "Juan", and "Dave." Dave was David Martinez, Juan was his best friend Juan Baca, and JRX was Martinez's brand. Martinez was from Atarque (interviews; see Dwelling Sites and Chapter 4, Site 485)).

## Probable Types of Hispanic and Anglo Cultural Resources Not Yet Discovered

The resources described in the preceding sections fall into seven categories: (1) dwelling sites; (2) camps and other range-use sites; (3) watering places; (4) roads and trails; (5) public or community facilities; (6) cemeteries and graves; and (7) miscellaneous. Dwelling sites include homesteads, ranch headquarters, and line camps — anything with an all-weather dwelling.

Camps and other range-use sites include those with other than all-weather shelters (tents, windbreaks, and so forth), as well as isolated corrals, fenced fields, and small fenced pastures. Watering places are improved water sources, mainly windmills. Roads and trails are old, abandoned military, trading, and other routes. Public and community facilities include stores, churches, schools, and so forth. The categories of cemeteries and graves and miscellaneous are self-explanatory.

Most resources in the SACA not yet discovered would probably fall into these categories, although not in the same proportions as the sites listed above. Recollections of interviewees are biased in favor of homesites, for one reason; thus, among the sites they identified, the proportion of camp sites and other range-use sites is far lower than it is among sites recorded during archeological survey.

### Dwelling Sites

Sites in this category would include headquarters of large ranches, headquarters of small ranches, homesteads, and line camps. Large ranch headquarters might resemble the Nations-Hubbell complex or similar headquarters elsewhere (Kelley 1982b:148).

Headquarters of smaller ranches and homesteads would resemble the many examples listed, as well as numerous archeological and ethnographic descriptions from the surrounding region (Boyett 1974:20-22, 49, 51; Counselor and Counselor 1954:18; Ford and Del Bene 1982:249-387; Kelley 1982d:177-179;

Langenfeld 1982:NM-Q-47-7; Levine et al. 1980; McGuire 1980:138-204; Stebbins 1980:31-33; York 1983:110-125). Some line camps probably would have small, one-room dwellings like those described.

Others might consist of several rooms in a row, each with its own entry, like the combination bunkhouse and barn described by York (1983:116-117). A site near St. Johns described by Stebbins (1980:38-39) resembles York's description.

As noted in the Historical Chronicle, dwellings that people built in a hurry, such as the first houses on homesteads, would be more likely to be of logs or particularly of picket construction. When people expected to use a dwelling for a long time, they were more apt to build of rock or adobe. In the list above, the Hispanic dwellings tend to be of rock, whereas the homes of Anglo homesteaders are usually of wood.

The Hispanic people probably expected to prove up on their homesteads, both because they were local and because they did not file entries until they found water.

The Anglo homesteaders, on the other hand, often lacked water and probably were not so sure they could make a go of homesteading in a place where many lacked relatives and friends. Table 3.3 in the Historical Chronicle above shows that Spanish-surnamed people did prove up their homestead entries in greater numbers than did Anglos.

The Anglo homesteaders who stayed tended to build second homes of rock and adobe, as noted in the Historical Chronicle.

### Camps and Range-Use Sites

These sites might include camps where homesteaders lived while they built their houses. A couple of possible examples are listed above. Boyett (1974:20) and Vogler and others (1983:32) also describe short brush-and-rock fences of the type that homesteaders used to enclose their land, fields, or pastures. An example is also described above in the SACA. The homesteaders used such fences because they had no money to buy wire.



Ranchers also fenced mesa tops to isolate certain types of stock, both cattle and sheep (Counselor and Counselor 1954; Johnston 1983:47, 80). Drift fences of wire or brush and wood have also been mentioned.

Another type of site was the lambing camp and associated small brush corrals, possible examples of which are described above (see also Counselor and Counselor 1954:90-108).

Camps of shepherds for the American Valley Company, Nations, and Hubbell appeared in various parts of SACA, including the area west of the Zuni Salt Lake. Some possible examples are noted above.

The same types of camps elsewhere in the region are described ethnographically and archeologically (Hayes et al. 1981:69-83, 94-98; Kelley 1982b:148-186; Parish 1962, 1963; Scurlock 1981:144; and Wilson 1979).

Miscellaneous camps for sheep and cattle herding are described archeologically for the area near St. Johns (Bridge 1980; Camilli 1981:47-48; Stebbins 1980:33-35).

## Watering Places

Improved watering places listed above include windmills, dams, hand-dug wells, and improved springs. Sites of many types tend to cluster around both improved and natural watering places in semiarid regions (Kelley 1982b:319-320, 336-341).

## Roads and Trails

Probably the most interesting of such sites would be the extensions of the roads into other parts of SACA outside the Homesteading Study Area as shown on the 1882-1884 plats. Although the road from Fort Wingate to Fort Apache ran north and west of the SACA, the presence of the Huning cabin below Zuni Salt Lake suggests that a road may have run from the Fort Apache or St. Johns vicinity through Zuni Salt Lake to the Rio Grande.

Early salt producers may even have sent some of the salt back to the Rio Grande Valley at least briefly during a "salt war" at the salinas east of the valley (Hart n.d.).

## Public and Community Sites

Those previously listed include stores, post offices, dance halls, and schoolhouses. Elsewhere in the SACA other types such as churches, "canteens," and stage stations might exist (interviews revealed such types in the country just outside the SACA). In localities where homesteaders settled densely, schools might be built every 10 or 12 miles so that students need not walk more than five or six miles each way (interviews).

Individual homesteaders donated land for one-room schools or sometimes they donated buildings. Groups of homesteaders might also build the schoolhouses themselves. Both ethnographic and archeological descriptions of such schools exist (Boyett 1974; Levine et al. 1980). Early stores and dance halls or "canteens" may be difficult to distinguish archeologically from dwelling sites (Kelley 1983).

## Cemeteries and Graves

Interviewees did not mention cemeteries and graves inside SACA, although they did mention several locations just outside the SACA. These include community graveyards at Adams Diggings and at Sunnyslope near Cerro Veteado, where there was also a school in the early 1930s and where at least one resident of the Homesteading Study Area is buried (see Site 500, Chapter 4).

People also mentioned isolated graves in Horse Camp Canyon east of SACA (supposedly a victim of a Nations gunman posted at the Horse Camp Well), another on a homestead near Techado, and two on a homestead west of Quemado. Isolated graves on homesteads, if not community graveyards, undoubtedly occur inside SACA.

## Miscellaneous Sites

Less common types of sites may occur elsewhere. One likely type consists of old section-corner markers that have escaped replacement by modern ones (see descriptions by Boyett [1974:19]). Another type, consisting of the camps and drill sites of oil crews, might resemble such sites elsewhere in the region (Kelley 1982b:295-310; Wilson 1979).

Petroglyphs form still another category (many may also be part of campsites, as described above).

## **The Importance of Hispanic and Anglo Cultural Resources**

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Hispanic and Anglo people have lived in SACA and have used it mainly for the secular purpose of gaining their livelihood. These uses contrast with the Native American uses, which have been principally religious or secular purposes with religious aspects.

The contrast between Native Americans, on the one hand, and Hispanos and Anglos, on the other, is especially clear in the different ways that the groups have used Zuni Salt Lake.

The Hispanics and Anglos interviewed for this document, most of whom belong to ranching families, have reflected on their history and are eager to see it recorded. The attitudes of many of these people may embody the contradiction

between wanting to preserve their heritage and wanting the government "off their backs," as described by ranchers in the surrounding region:

Many [ranchers] feel a historical value to their lifestyle. They feel they are fulfilling the pioneering efforts of earlier generations and of others who settled the West, finding a use for the land that nobody wanted. They admire those pioneers' independence and self-reliance and resent any regulation which encroaches upon or takes these traits away (USDI, BLM 1982a:II/69).

Those in the region not involved in ranching "generally adhere to the social values of preserving . . . ; [and], preservation of archeological sites" (USDI, BLM 1982a:II/70).

The Hispanic and Anglo sites in SACA contain physical evidence of past ways of life in their architecture and the artifacts — a valuable record of nineteenth and twentieth century life in this little-studied region.



# Historic Sites in the San Augustine Coal Area

**T**he various sources of information reviewed in previous chapters indicate many cultural resources in the SACA, especially in the Homesteading Study Area. The procedures for identifying these resources (interviewing, surveying drill holes and rights-of-way, reviewing the available literature and documents) do not guarantee that the resources identified form a representative sample.

The San Augustine Coal Area survey was designed to provide a representative sample of all archeological sites, both prehistoric and historic, in three separate areas that the BLM would lease for a moderate level of coal production (the Homesteading Study Area corresponds closely to this Moderate Production Area).

Unfortunately, the survey was not able to cover the minimum of 10 percent of the three areas needed for statistically valid generalizations about the combined areas, or the Homesteading Study/Moderate Production Area. Moreover, the number of historic site components (clusters of historic materials in isolation and historic and prehistoric materials combined) recorded during the survey is so small as to defy meaningful statistical breakdown and analysis.

This chapter will describe the individual historic sites and general characteristics of the site inventory, then indicate patterns in the structure, spatial distribution, and distribution through time of sites in the Homesteading Study Area/Moderate Production Area that

both the survey data and other data suggest. The chapter ends with a discussion of refinements in field methodology necessary for future testing of the hypothesized patterns.

## Methodology

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Chapters 1 through 4 discuss the methodology for the sample survey in general; therefore, only methods peculiar to the recording of historic sites need be discussed here.

## Architecture

The recording of historic and prehistoric architecture is the same with respect to rooms, wall types, and ground plan. The elevations of structures were not recorded for historic features.

Historic architectural descriptions require a separate set of terms for construction elements in rooms and for architectural features other than rooms.

### Construction Elements of Rooms

#### — Board-and-batten:

These elements include broad, usually rough cut planks placed vertically and abutting to form a wall. Narrower vertical elements are then nailed over the cracks between the boards.

Board-and-batten construction requires little framing and is common in barns and outbuildings. Colloquially, frame construction with

board-and-batten outer walls is called "single box" construction. If the walls are also faced with boards inside for extra insulation, the term used is "double box."

#### → Bark slab:

The first cut through a log produces a rough cut plank with the bark still on the outside. Such planks are cheap and are common in outbuildings.

#### → Unsurfaced log:

These elements are hewn logs laid horizontally and often notched at the ends to form interlocking corners.

#### → Masonry:

Rock used in buildings in the survey quadrats was usually sandstone. Wall types are equivalent to prehistoric masonry types. The compound type is the most common.

#### → Adobe:

Adobe construction elements in the survey quadrats were all molded block.

#### → Jacal:

Jacal construction elements are large, upright posts fitted into a notched horizontal bond beam. Spaces between the posts are ordinarily filled with adobe. Jacal construction often appears in combination with masonry or adobe.

### Architectural Features

On the historic sites, only rooms were classified as structural features. All other features are considered nonstructural.

The terms employed in the site descriptions and analysis of the sample below are self-explanatory.

### Artifacts

Field crews identified all historic artifacts on the sites and did not collect them for laboratory identification. On sites with few artifacts, crews noted all functionally identifiable types and all chronologically sensitive attributes. They did not necessarily record systematic complete inventories of artifacts, however, nor the locations of artifacts in relation to site features. On sites with many artifacts, usual-

ly one or two of the largest concentrations were recorded in the same way as were those on sites with few artifacts.

## Historic Site Descriptions

The survey recorded only 19 historic site components. All components were left by the region's Hispanic or Anglo occupants. This section summarizes the archeological data for each. All readily available documentation on each site, from county and BLM State Office land records and the homestead case files from the National Archives, was also gathered. An attempt was made to locate and interview former users of each site or their descendants. So many families have left the region since the 1930s that this effort was not entirely successful.

More often, the best information obtainable was from people who lived nearby or who now own the land. Time did not permit visits to all sites with interviewees, who instead identified most of them from map locations, archeological survey descriptions, the interviewer's verbal descriptions, and, occasionally, photographs.

### Site 242

Site 242 (LA 47965) is a scatter of trash and a possible campsite along an unused two-track road. The two features probably date to the early and middle twentieth century, respectively. The site is situated in the SW/4 of NW/4, Section 23, T.4N. R.17W., on an open, eastward sloping hillside along the edge of the trees. Feature 1, the trash scatter, consists of brown and aqua glass with some prehistoric material (three lithic flakes, one prehistoric sherd). The aqua glass suggests that the feature antedates World War I. Feature 2, the possible campsite, consists of a clear glass, machine made bottle (liniment?) with ACEITE MEXICANO ("Mexican Oil") embossed on the bottom, one knife-opened can (size possibly 400 x 800), and a snap-type(?) can lid, all mixed with small chunks of charcoal and prehistoric artifacts (two lithic flakes, one cobble mano). The clear-glass bottle probably postdates 1930, for clear glass produced before then turned purple or amber when ex-



posed to the sun. Gilpin (1982:648) reports a bottle with the same inscription, but in aqua glass and hand-finished, on a site component dated to 1904-1907. The prehistoric artifacts on both features may have washed down from a prehistoric site upslope or campers may have collected them.

The land is BLM land, so that there is no ownership history to offer clues to the site's history. Located within two miles of the Nations' and later ranch headquarters, the site may have been a camp for Nations' cowboys or herders (Feature 1), and later for Hubbell's herders (Feature 2). Feature 2, in particular, resembles the camps of herders who worked for a large-scale sheep rancher near Chaco Canyon, New Mexico, recorded by Wilson (1979).

### Site 256

This homesite (LA 47979) probably postdates 1930. It is situated in the SE/4 of NE/4 of Section 17, T.3N, R.16W, about two miles north of Mesa Tinaja in the Mangum Ranch vicinity. It stands on a southward sloping hill in the juniper parkland. The site's single feature is the remains of a house; a sandstone foundation 5.5 m by 5 m with charred logs and chunks of baked adobe shows that the house burned.

Inside are scattered parts of a woodburning stove (sheet-metal or cast iron is not specified) inscribed DB on the doors, and melted glass (clear and iridescent aqua). The site description mentions no trash dumped or scattered outside the house. Either the field crew missed a dump or the site was not occupied for very long (possibly because of the fire).

The first homestead entry on the land was that of Thomas H. Summers of Santa Fe (SF 032992). It was allowed in 1918 and relinquished in 1920. It is therefore probably too early to be related to this site, although the aqua glass suggests some World War I period use. The next entry was that of Duain Mangum of Fort Wingate, New Mexico (SF 063584), which was allowed in 1931 and relinquished the next year. The site could date to his short tenure. The scarcity of trash supports this hypothesis.

The site might also date to the tenure of Edna Wooten Mangum, an in-law of Duain Mangum. In late March of 1932, still unmarried Edna Wooten moved onto the land and filed a homestead entry, according to her Final Proof testimony. She lived on the land until she married Kay Mangum in 1934. She then moved down to his homestead in Sections 21 and 22 of the same township, where he had lived since about 1930 (he received Patent 1079145 in 1935). She continued to keep cattle on her own land.

The homesite she occupied between 1932 and 1934 was not Site 256, however. It was situated in the NE/4 of the SE/4 of Section 17 and consisted of a three-room lumber house, a log storehouse, a pole corral, two chicken houses, a dugout, a cistern, a dirt tank, and a fenced garden. The fact that the house was already on the land when Edna Wooten moved there suggests that it belonged to a previous claimant, most likely Duain Mangum; thus, Site 256 may not have been his house, either.

On the basis of the location and evidence of burning, interviewees suggested that the house may have belonged to old Mrs. Carter. She was the widow of the cowboy employed by Nations and later killed by Salty John Cox in Magdalena; she either homesteaded or squatted in the Mangum Ranch locality during the 1930s. One of her daughters had married Kay Mangum before Edna Wooten did.

Ties between the Carters and the Mangums may have been long standing. In 1928, three years before he filed on the land around Site 256, Duain Mangum was allowed an entry (SF 055916), which he relinquished in the same year, in Sections 34 and 35, T.4N, R.18W. This entry was about a mile north of Berdell Carter's homestead entry (relinquished eleven years earlier) around Carter Well. Perhaps the two families shifted from that area to the Mangum Ranch vicinity in 1929 or 1930. Mrs. Carter, if indeed she was related to Berdell Carter, could have squatted around Carter Well in the intervening years.

Mrs. Carter's daughter then died, and Kay Mangum reportedly left. Old Mrs. Carter took the Mangum children and wandered around the Mesa Tinaja country with a small herd of

goats wherever there was feed. Kay Mangum returned later and married Edna Wooten, but he gave Mrs. Carter a place to stay. She had a small cabin that later burned, way back in the country north of Kay Mangum's ranch house.

If Site 256 is that cabin, it would postdate the marriage of Kay Mangum and Edna Wooten, since it is on Edna Wooten's land. Interviewees did not know the eventual fate of old Mrs. Carter or her grandchildren.

### Site 259

This post-1930 homestead (LA 47982) is situated in the NE/4 of NW/4 of Section 8, T.3N. R.16W., at the edge of the trees on a grassy, east-sloping hillside. The site consists of a crudely built, one-room rock house of 4 m by 5 m with walls still standing and a rectangular corral area about 20 m by 22 m outlined by widely spaced posts, presumably once strung with wire.

Artifacts include miscellaneous metal cans, tops, and bases; lard buckets or jelly cans; coffee can; and a large brown jug and sherds. The manufacturing techniques evident in the cans and glass were not described, but indicated a post-1930 date to the crew that recorded the site.

The site may have belonged to Julia Pruitt Allred, widow of the Orwin T. Pruitt who filed on the land in 1930. It is too late to date to the only previous entry, that of John H. Reynolds of Lovelady, Texas (SF 032994), which was allowed in 1918 and canceled in 1923. Julia Pruitt Allred testified in her Final Proof that Orwin Pruitt died only a few months after filing his entry, when the family had not yet left Fort Bayard, New Mexico, to establish residence on the land.

The widow of a World War I veteran was not required to establish residence until the date of the Final Proof, which the General Land Office also extended for Pruitt's widow. She and her new husband moved from Hurley, New Mexico, where he had a job, and established residence in 1937. They built a rock house, four corrals of cedar posts, and a dirt tank. Although the Final Proof testimony gives the

location of the homestead as the NE/4 of Section 8, the improvements it mentions resemble those in the site description. The location as written may contain a typographical or other error. Julia Pruitt Allred received Patent 1096812 to the entire section in 1938. She still owned the land around 1940, but may have lived on it only during the short time when she was proving up.

### Site 269

Site 269 (LA 48089) is a brush corral, possibly dating to the twentieth century, together with a supposedly Anasazi hearth. It is situated in the SE/4 of NW/4, Section 19, T.3N. R.16W., on a southward sloping, wooded hill about a mile and a half southeast of "Old" Tejana Windmill. The corral measures 27 m by 12 m and lacks associated artifacts. The hearth has been identified as Anasazi because it is stone-lined and because the only associated artifacts are prehistoric. These artifacts, two sherds and three lithics, are so few that the hearth may not be associated with the corral, and that the prehistoric artifacts eroded from an Anasazi site nearby or were collected by campers as at Site 242. The site is near the road along the east side of Tejana Mesa that dates back to at least 1882; the corral alone indicates repeated use, so that a prepared hearth would not be anomalous.

Another possibility is that the hearth dates to the historic period, but is not contemporaneous with the corral. The corral is constructed in a way common among both Native Americans (especially Navajos) and the Hispanic and Anglo small-scale stock owners, because all these people lacked money for wire and milled lumber. Native Americans rarely herded in SACA, however, so the site is more likely to be Hispanic or Anglo. The origin of the hearth, if historic, is anybody's guess.

The land around the site is BLM land. The only documented homesteading is the entry of Lee R. Cross or Gross of Clovis, New Mexico (SF 061194) allowed March 22, 1930, and canceled March 14, 1935. The site probably lies within the area over which old Mrs. Carter ranged with her goats (see Site 256), although the corral seems unnecessarily large for the small herd she reportedly had.





**Figure 4.1: Whitley-Black house at site 271.**

## Site 271

Site 271 (LA 48084) is a homesite that dates to about 1930-1950. It is situated in the NE/4, Section 12, T.4N. R.16W., in a swale in the piñon-juniper parkland. Features on the site include a four-room house with a screened porch (Figure 4.1); a house yard (presumably once fenced) with a small side yard that perhaps encompassed a flower or kitchen garden; a privy; two burned rectangular spots that might have been outbuildings; one or two corral areas; a windmill, stock tank, and stock waterer now in use; a concrete pad for an older stock tank; and a salt trough with salt blocks, also now in use.

The log house was evidently built in stages, "shotgun" style. Perhaps first was the dugout (6 m by 4 m) with cabinets and hole for a stovepipe; and finally the front room (7.5 m by 8 m) with its massive fireplace of sandstone and petrified wood and its lathe-covered walls (presumably once plastered).

On the fireplace, two stones are engraved PHI and 2B, the latter (or both) presumably a

brand. The occupants seem to have had a penchant for engraving rocks, for near the privy is a headstone inscribed "Puppy died May 3-42."

Hundreds of artifacts lie scattered both inside and outside the house. The biggest are a wagon and parts of a windmill. Other artifacts found outside include parts of a cast-iron kitchen range and a washtub and wooden shelf east of the house, as well as several concentrations of artifacts and evidence of burning to the east between the house and one of the corrals.

These concentrations include an ashy area with heat-warped glass, a baby-buggy wheel, and fragments of a prehistoric bifacial stone knife; a dump consisting mainly of evaporated milk cans and also a Clabber Girl Baking Powder lid, Coors beer cans (without pull tabs), (broken "china," lard cans, pocket tobacco tins, bedsprings, and a baby-buggy frame; a scatter of cans opened with church keys, a metal wash basin, a long-necked brown bottle with a screw top (FRUIT INDUSTRIES LTD), metate fragments (probably prehistoric), and

pieces of a kerosene heater; and more trash inside the outlines of the burned outbuildings, including another piece of a probably prehistoric metate, car-seat springs, a window screen, another baby-buggy wheel, chunks of petrified wood, assorted cans, a cast iron wheel hub and cast iron brackets, a glass bottle (J.F. WATKINS CO.), porcelain plate sherds, a small metal basin, a toy wagon bed, and sun-purpled glass. Inside the corral near the burned spots are a PENN TRUMP oil can and the "blade wheel" of a windmill.

The concentration of trash and evidence of burning between the house yard and the corral suggests that the occupants dumped and burned their trash there. Perhaps the outlines of the burned outbuildings are merely spots where the trash was burned, maybe in some sort of large rectangular container that served as an incinerator. The prehistoric artifacts scattered about the site may have come from a rubble mound just up the hill to the south along the road to the house, where some modern trash has also been dumped. Perhaps the prehistoric mound was the source of the basalt cobbles that indicate fence lines around the house and the possible vegetable- or flower-bed borders.

No less numerous, and better preserved, are artifacts inside the house. In the dugout are a Borden's Meadow Brand malted milk can with screw lid, a Schilling two-pound coffee can, a child's boots, glass jars with LADY'S CHOICE (cold cream or hand lotion?) on their screw lids, four-pound lard pails (FLAKE-WHITE, PURE VEGETABLE SHORTENING, PROCTER AND GAMBLE), a large assortment of clear-glass jars, bedsprings, a bed frame, paint cans with pry-off lids, and a long-sleeved flannel shirt.

In the passageway to the kitchen are a Maxwell House coffee can lid (strip-key opened), Karo Syrup lids, and a face-cream jar. In the kitchen are stovepipes, paint cans with pry-off lids, a HEINZ 57 VARIETIES bottle with a screw cap, evaporated milk cans, assorted clear-glass jars, Maxwell House coffee cans, and wooden windmill rods. On the screened porch are a window screen, a Schilling coffee jar (vacuum-packed), screw lids, canning jar seals, and sherds of a white glass bowl. The

distribution of artifacts suggests that the dugout and possibly the small passageway to the kitchen served as bedrooms.

No rubbings of embossing on glass containers or cans were taken, nor were characteristics of cans and glass that indicate temporally sensitive methods of manufacture generally recorded; thus the chronological information embodied in the artifact assemblage was largely ignored. The predominance of clear glass and virtual absence of early colors (sun-purpled, aqua, amber) suggest that the site was occupied after 1930, as does the Maxwell House coffee can, while the absence of pull-tab cans indicates abandonment before the early 1960s. In the opinion of the crew that recorded the site, it antedates 1950.

Interviewees identified the site, on the basis of the archeological description and map location, as the "Old Black Place." In 1927, Joseph Cates' entry on the land (SF 055726) was allowed, but he did not occupy this site (his cabin is discussed above under Resources Indicated by Interviewees). He relinquished in 1931. Interviewees had never heard of Linnie De Foor of 617 Douglas St., Las Vegas, New Mexico, who filed the next claim. Her claim was contested and canceled in 1933, and she may never have lived on the tract.

The occupation of the Old Black Place seems to have begun with Annie S. Whitley, who filed on the land on August 10, 1933 (her entry was allowed 10 days later), and who evidently contested Linnie De Foor's claim. Mrs. Whitley had been living on the land since April 10, 1933, according to her Final Proof testimony. A house was already on the land when she moved in. Between 1933 and 1935, she either added rooms to the original house or built a new log house of four rooms. In 1933, she installed two corrals; in 1934, a 120-foot well and windmill; in 1935, a hay barn and "ice house or garage"; and in 1937, stock sheds. She also fenced part of the property with wire. She cultivated a vegetable garden and ran stock on the land. Although she identified herself as a solitary widow, interviewees remember that "Ma" Whitley lived on the site with her daughter Billy, Billy's husband Fred Black, and their children. They ran cattle there all year. In 1938, Annie Whitley received Patent



1096819 to 640 acres in the S/2 of SW/4 of Section 6 and the W/2 and W/2 of SE/4 of Section 7, T.4N. R.15W., as well as the SE/4 of SE/4 of Section 1 and E/2 of Section 12, T.4N. R.16W.

"Ma" Whitley died sometime in the 1930s or early 1940s. The Blacks sold the place in 1944 to a neighbor, who never occupied the homesite and soon sold it to another neighbor. By the time they sold out, the Blacks also may have owned the 640-acre homestead of Joseph Cates, their former neighbor on the west. At the time of the sale, the Black children reportedly had gone to work in the California aircraft industry. Billy Black died around this time. Fred Black moved to another small ranch several miles east near Veteado (Interviews).

In later years, bottle collectors have scavenged the site, and the current owners visit it periodically to tend the windmill and put out salt for their cattle. A more careful recording of datable characteristics of artifacts might have revealed evidence of these uses after the Blacks abandoned the site.

## Site 282

The site (LA 48003) consists of a brush fence with a small masonry segment and petroglyph at its southern end. The petroglyph reads "Benjamin Campos Macos 20, 1921." Situated in the NE/4 of NE/4 of Section 25, T.4N. R.18W., the fence follows an old section-line fence along the talus on an east-facing slope between Section 25 of T.4N. R.18W. and Section 30 of T.4N. R.17W.

On March 4, 1922, Alfred E. Harris received Patent 853157 for all of Section 25. The neighboring Section 30 remained public domain until Walter Ashford Burns filed on it in the early 1930s. He received the patent (1104115) to the entire section on August 2, 1939. No previous entry is recorded in either section.

The inscription clearly dates from Harris's time, but the fence is not necessarily contemporaneous. It probably antedates World War II, for after that stock owners in SACA could afford wire fence. Campos could have been either linked to Harris or a squatter on the neighboring Section 30. He may well have

been related to Adela Campos of Atarque, whose entry on Section 9, T.4N. R.17W. a couple of miles northeast was allowed in 1913 and relinquished in 1918.

## Site 315

This site (LA 48014) is a brush fence of two wings respectively 10 and 15 m long that form a right angle; one wing crosses a small draw. The fence is situated along the eastern base of Tejana Mesa in the NE/4 of SW/4 of Section 30, T.3N. R.16W.

The function and date of this site are unknown. Perhaps it was a drift fence to keep cattle from going up onto the mesa, analogous to the fence that the Cates family built elsewhere in the SACA (see Resources Indicated by Interviews). The fence is not located at any corner in the boundary of any homestead entry made in the section. The former homesteaders are Lee Niles of Beaver, Oklahoma, whose entry (SF 039547) covered the entire section, was allowed in 1921, and was relinquished in 1923; Floyd Gross or Cross of Clovis, New Mexico, whose entry (SF 039547) also covered the whole section, was allowed in 1930, and was relinquished later the same year; and James E. Hair, who received a patent (Pat. 1070509) in 1934 that included Lots 2 and 3, SE/4 of NW/4, E/2 of SW/4, and E/2 of Section 30. The use of brush does suggest that the homesteaders built the fence, for large stock owners like Nations and Hubbell, and all stock owners after World War II, were able to afford wire fencing.

## Site 320

In an open valley bottom in the NW/4 of NW/4 of Section 21, T.3 N. R. 16W., are the well and rock foundation that constitutes Site 320 (LA 48019). Wooden beams frame the hand-dug well, from which a carved log trough extends (Figure 4.2). Presumably the log frame was to keep cattle out of the well itself. Bedsprings cover the well opening (another deterrent to cattle, perhaps), and trash is scattered inside the frame. A foundation of sandstone blocks about 3 m by 3 m lies 3 m from the well. Artifacts are described on the field form only as "cans, glass, and barbed wire" from the "early 20th century."

The site lies within the homestead patented to Hyrum K. (Kay) Mangum on October 18, 1935 (Pat. 1079145) and may date to his tenure. It may instead, however, date to the tenure of Benjamin Harrison Jarrell, who had previously filed on land in Section 21, T.4 S. R. 7W. (near Hillsboro, New Mexico). This second entry was allowed on June 14, 1923, and relinquished on June 9, 1926.

Interviewees identified Harry Jarrell, a cowboy from Nations' outfit. Other Nations' cowboys who filed on land before Nations went broke did so to protect water sources, and the same may be true of Harry Jarrell.

If the well really produced much water, Mangum and whoever used the land in between (Hubbell herders probably) would have used the well also. A more careful identification of the artifacts might reveal more about the period(s) during which the site was used.

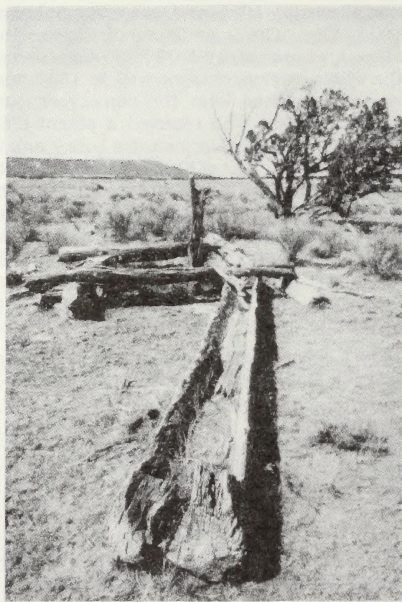


Figure 4.2: Well frame and hewn log stock trough at Site 320.

## Site 321

The petroglyphs and cairn that make up this site (LA 48020) are situated on a ridge in the SE/4 of SW/4 of Section 4, T.3N. R.16W., 32 m west of a two-room Anasazi masonry structure and accompanying artifacts. The cairn is made of "2-3 slabs of caprock." A pocket tobacco tin lies downslope. The petroglyphs include several illegible names. Over a picture of a woman with hair in a bun and wearing a long dress with puffed sleeves is the inscription, "John and Juanita."

The site is actually on the boundary between Sections 4 and 9, and the cairn probably marks it. If so, it may date to the time when homesteaders had filed on both sections. Patents were issued to both sections almost simultaneously in 1937: to Thomas Walker (Pat. 1088461) on February 19 for all of Section 9, and to Ellis Killen (Pat. 1088947) on March 15 for all of Section 4 (see Resources Recorded by Previous Archeological Survey above, Site DCA-83-480). The Killens and the Walkers, therefore, probably also filed entries approximately the same time, probably 1931 or 1932.

Killen's entry was the first in Section 4, but earlier entries were filed in Section 9. In 1917, Hustin Rollo of Rotan, Texas, filed on the entire section (SF 032993). General Land Office correspondence to Rollo later was forwarded to him in Lowell, Arizona, and to him in care of John H. Reynolds of Lovelady, Texas, who had filed on neighboring Section 8 (SF 032994). Five-year notices and other correspondence sent at the same time to Rollo in Quemado, Lowell Rotan, and Lovelady all went unclaimed, and the entry was canceled in 1924.

In 1930, Lou E. Priest of Fort Bayard, New Mexico, filed on the section (SF 061901). Someone evidently contested his entry, however, and he relinquished in 1931, presumably to Thomas Walker. Probably neither Rollo nor Priest ever lived on the land.

The petroglyphs are not necessarily contemporaneous with the cairn (nor with one another, for that matter). The site is a short distance south of the Killen school (see Site 323), which the Walker children and those of



other homesteaders to the south attended. Perhaps it was a favorite stopping place for children on the way home from school – especially with an Anasazi site nearby to explore.

### Site 323

A crude masonry building, on a 5 m by 8 m site (LA 48022) is alone in the piñon-juniper parkland that slopes gently southward in the SW/4 of SW/4 of Section 4, T.3N. R.16W. Roof beams, upright roof supports, and the door frame are of ponderosa.

The south wall is incomplete, perhaps salvaged or never finished. A rock pile and a sparse scatter of trash (canning-jar lids, unfortunately insufficiently described for dating; pieces of clear glass; a post-1960s Coke bottle) complete the inventory.

This building (Figure 4.3) is on the homestead of Ellis Killen (see Site 321 above). On the basis of map location, the archeological site description, the author's verbal description, and photographs, interviewees identified it as the Killen School. In the early 1930s, the Kil-

len family built it to serve as a community building for homesteaders in the vicinity of the upper Nations Draw and Mesa Tinaja. The Killens themselves had three homesteads in the area: Ellis in the same section as the school; brother Joe in the neighboring Section 5 (see Site 497); and sister Nona and the parents a couple of miles northeast in Sections 25, 26, and 27 of T.4N. R.16W. (see Nona Killen Moore homesite under Resources Indicated by Interview). The building served as a "church-for-a-day" for a visiting preacher, and also as a school for two or three years in the early 1930s.

The children who attended the school would have included those of Ellis Killen, a son of Thomas Walker from neighboring Section 9 (see Site 321), a daughter of Jahue W. Langford (Pat. 1100785, 1939, in Section 15, T.3N. R.16W.), and children of the Wootens (see sites 498 and 500). The canning jar lids may reflect how mothers packed school lunches at the time. Like many schools in the 1930s, this one may have failed to survive because people moved away; at least, the Wootens did.



Figure 4.3: The "Killen School" building at Site 323.

### Site 331

The site is a large Anasazi ruin (LA 48030) bisected by a small channel that has been dammed, probably in both prehistoric and historic times, to form a reservoir. The site is situated in the W/2 of NE/4, Section 20, T.4N. R.15W. No historic artifacts are associated with the dam.

The earliest user of the land in historic times may have been the Nations' outfit. In 1917, Paul B. Moore of Magdalena, New Mexico, filed a homestead entry for the entire section. In 1918, he was away in the Army; in February of 1922, the entry was contested. Later in the same month, Moore relinquished it (see Resources Indicated by Interviewees, Techado). Whoever bought Moore's relinquishment (SF 044073; the name on file is illegible) also relinquished the next year. The successor, Mary E. Foster, received the patent (Pat. 1024447) on March 1, 1929. Any of these or later users could have built the reservoir. Nations and the two who relinquished seem less likely candidates than Mary Foster and her successors.

### Site 465

Situated on an eastward sloping, grassy hillside at the edge of the trees in the SE/4 of SW/4 of Section 23, T.4N. R.16W., this site (LA 48051) seems to have served at least three different purposes at three different times since its first use as a homesite in the 1930s. Features on the site include a log cabin, windmill, earthen stock tank, two-room shack, corral, and salt licks; a possible dugout south across the arroyo may also be associated.

The cabin may have been built first, probably along with the windmill and possibly the stock tank. No artifacts were recorded in or immediately around the cabin, but the earliest artifacts on the site (provenience unstated) seem to date to the 1930s. The horse-drawn plow on the site suggests that the site at this time was a homestead, not a line shack. The cabin was later dismantled; the corral consists of logs from a cabin, presumably the one on the site, and therefore probably postdates the cabin. A two-room board-and-batten shack, now collapsing, is connected to the corral and

is surrounded by 1950s trash, including a 1949 New Mexico truck tag (number 28-349). Trash of the 1950s also fills the back of an early 1930s sedan cut in half. This evidence suggests that someone turned the site into a line camp around 1950. Finally, the stock salt and a functional earthen tank indicate that the site is still in use.

The location and archeological description of this site suggested to interviewees that it was originally the home of Bill Lee, who occupied it until, they said, around 1930. The site indeed lies within the homestead entry of Bill Lee, who filed on the land in March of 1917. Lee said in his Final Proof testimony that he had lived on the land with his wife and six children since August 8, 1918. They lived in a tent while they built the house. Between then and 1920, they fenced most of the claim with wire, built a tank, two log cribs, a hen house, four corrals, a shed 60 feet long, and another log house for storage. In 1922, they had two wells drilled, each 50 feet deep. They cultivated eight to 47 acres of corn, beans, caffa corn, and spuds. They also kept cattle, horses, hogs, and chickens.

Bill Lee was part of a family, like the Moores and the Killens, with several homesteads in a block. Bill's brother Frank, who was on the land by 1918, eight years later received a patent (Pat. 986093) to lands bordering Bill's in Section 11 and 14. A nephew, Lyo Lee, had an entry (SF 063872) in Sections 13 and 15 of the same township and Section 31 of T.5N. R.16W., filed in 1931 and canceled in 1938 (though Lyo reportedly left in 1932).

The early 1930s homesteads of Bud, a brother of Lyo, in Section 26 of T.4N. R.16W., and Reuben Wright, a cousin of Bud and Lyo in Section 11 of that township, were discussed above (see Resources Indicated by Interviewees and Resources Recorded by Previous Archeological Projects, Site DCA-83-299).

On October 2, 1923, Bill Lee received Patent 919016 to 640 acres of land in the SW/4 of SE/4 of Section 14 and the N/2, N/2 of S/2, S/2 of SW/4, and SW/4 of SE/4 of Section 23, T.4N. R.16W. He had evidently abandoned the site immediately after his proof test earlier in the year and had moved to Gravette, Arkan-



sas. Nephew Bud dismantled Bill's house during the early 1930s and rebuilt it on his own homestead. By 1940, the land had evidently passed out of the family and belonged to Carl Scoggin.

If Site 465 is indeed Bill Lee's homesite, it does not match the archeological description very closely. The evidence of extensive later salvaging, modification, and reuse may explain why.

### Site 466

This undated homesite (LA 48050) is situated in juniper parkland on a hillside in the NW/4 of NW/4 of Section 4, T.4 n. R. 17W. It appears as a "ruin" on the Fence Lake SW 7.5-minute USGS quad map (1972). The site consists of a one-room adobe house of 4 m by 4.5 m on a sandstone foundation and a couple of rock piles, presumably left over from the foundation. The walls stand 2 m high, but no roofing material is evident anywhere. This absence and the lack of trash and other features suggest that no one ever lived in the house. A trash dump containing a 1971 license plate and bottles and cans of the 1960s and 1970s undoubtedly postdates the house.

In June of 1933, Marie I. Bell of Fence Lake filed on the land. According to the Final Proof testimony, she camped on the land while building a house in the NE/4 of Section 5. She married Mr. Graham of Odessa, Texas the next month. Between 1934 and 1937 she added a tank and adobe barn to her homesite. Neither the location of this site nor its inventory of features matches with Site 466. Without artifacts to provide dates, one cannot tell whether the site antedates or postdates Marie Graham's tenure. The land is still in the Bell family.

### Site 482

Incorporating a nook in a sandstone outcrop, this brush corral (LA 48066) measures 30 m by 45 m and is situated in the NE/4 of NE/4 of Section 10, T.4N. R. 17W. A possible hearth lies inside the corral. The only artifacts are prehistoric ones that have washed down from nearby Site 471.

The corral has not been dated, and whether the hearth is contemporaneous remains un-

known (see Figure 4.4). This corral and that of Site 269 are of a type common to Native Americans, Hispanics, and Anglo homesteaders before World War II, but is more likely to be of Hispanic or Anglo origin than Native American. It could have sheltered either sheep or cattle. The only homesteader on the tract, Emilio Lusero, first settled there in 1932 or 1934 and received his patent (Pat. 1106867) in 1940 (see Site 484). He raised cattle, however, and would not have needed such a corral for them so near his homesite.

Earlier users evidently included David Martinez (see Site 485 and Resources Indicated by Interviewees, Miscellaneous Sites), who homesteaded and ran cattle in the vicinity during the 1920s, and Jose Antonio Candelaria (see Resources Indicated by Interviewees) who was there from about 1908 into the 1930s. Possibly herders for David O. Garcia, or someone who ran sheep or shares with him, used it.

### Site 484

A homesite of the 1930s, Site 484 (LA 48068) is situated in the NW/4 of the NE/4 of Section 10, T.4N. R. 17W. It lies along the edge of the trees on the grassy eastern slope of a ridge with prehistoric ruins on top. Features on the site include a two-room house, one room (3.1 m by 3.6 m) of jacal and the other, abutting the first, of adobe (3.1 m by 3.5 m); a rock outbuilding (1.7 m by 2.7 m), a corral of posts and wire (10 m by 7 m); another area (6 m by 12 m) enclosed by a fence and containing dumped trash; and a possible horno (see Figure 4.5).

Artifacts were not recorded by provenience; the inventory on the entire site includes clear, brown, and cobalt-blue glass; a Jergens lotion bottle; coffee cans opened with strip keys; a can 303 by (?) with TOXCH 154 on the bottom; a beer can opened with a church key; small milk cans; and wire, nails, and milled lumber.

The predominance of clear glass and absence of purple or aqua, the predominance of sanitary-seal cans, the presence of key-strip-opened coffee cans, and the absence of pull-tab cans all indicate that this site, like Site 271, was occupied sometime between 1930 and the early 1960s.

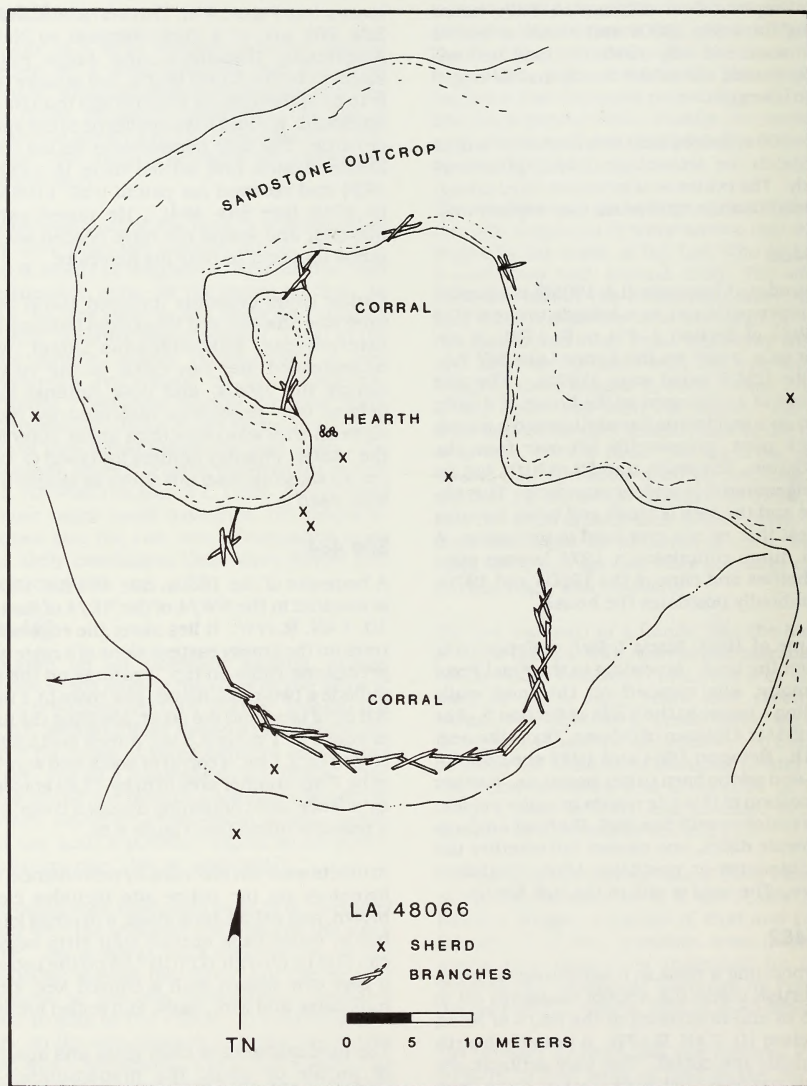


Figure 4.4: LA 48066 (Field No. 482), historic brush corral and possible hearth.



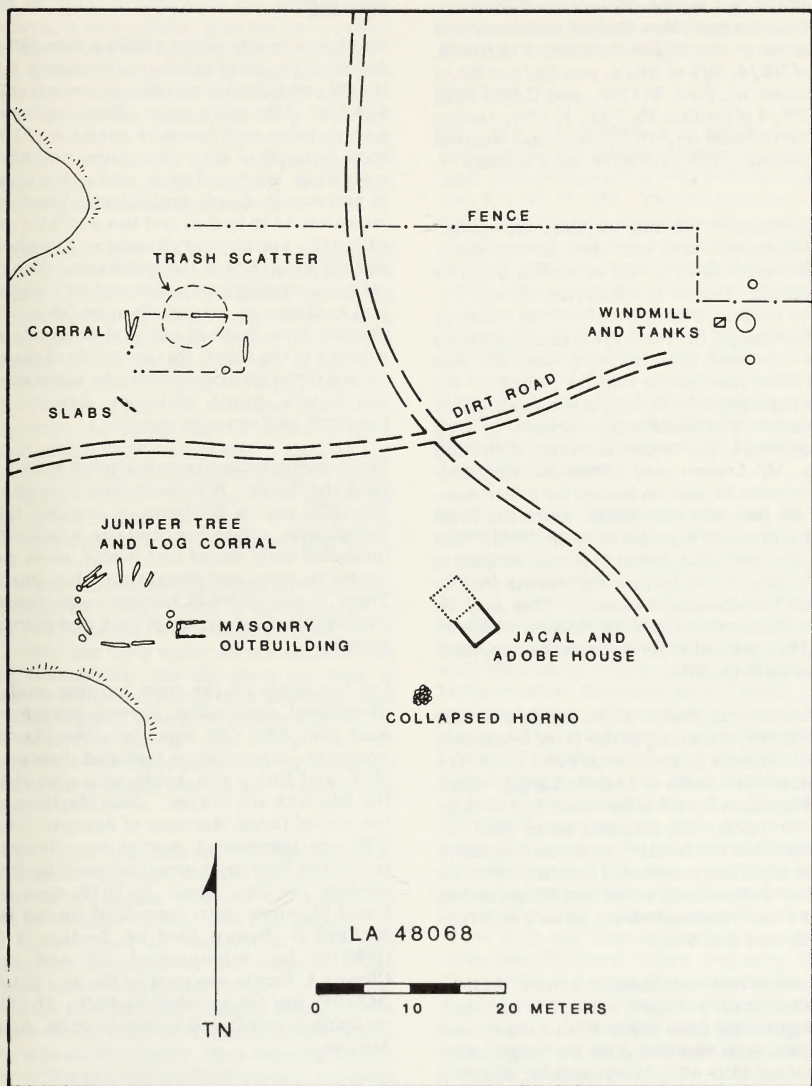


Figure 4.5: LA 48068 (Field No. 484), 1930s homesite.

The site is on the former homestead of Emilio Lusero of Atarque, New Mexico, which covered 640 acres in the N/2 of N/2, SE/4 of NW/4, S/2 of NE/4, N/2 of SE/4, and SE/4 of SE/4 of Section 10, T.4N. R.17W., and E/2 of W/2 and SW/4 of Section 35, T.5N. R.17W. Lusero filed on the land on July 5, 1933, and received the patent (Pat. 1106867) on February 9, 1940.

On the basis of the map location, archeological description, and site visit, several interviewees identified the site as Emilio Lusero's homestead. One of the interviewees was Mr. Lusero himself, who said he built the house in 1932, although his Final Proof testimony says 1934. He lived there alone or with his wife until 1943 (the couple had no children). He made the adobes on the site in the small fenced enclosure. The fence was necessary to keep his cattle out. The house had a roof of dirt and poles. Mr. Lusero used adobe and local timber because he had no money for milled lumber. He had only one corral, which his Final Proof testimony says he built in 1935. The masonry outbuilding next to it was the base of a corn crib, where he also kept weeds that he cut for his cows and horses. This may be either the shed or the barn, both of which he listed in his Final Proof testimony as improvements built in 1935.

He raised corn, beans, and squash in a field (of 17 acres, according to the proof testimony) about a quarter of a mile west (NW/4 of NW/4 of Section 10, north of Laguna Larga), which was separated from his homestead by the ridge with the ruins. He obtained water from the windmill that his brother-in-law had installed on the adjoining homestead (see Site 485). He also had a stock tank in Section 35, according to the Final Proof testimony, as well as fences of both wire and brush.

Mr. Lusero had only about ten cows. At first, he had no team or wagon, either, but eventually bought a rig from his brother-in-law, Jose Martinez, who was living on the neighboring homestead (Site 485). Later still, he bought a Model A. His wife sometimes stayed in Atarque owing to illness. When she died in 1943, he abandoned the homestead, sold the land to Bert Cox, and went to California to work.

## Site 485

Another homesite of the 1930s is Site 485 (LA 48088) in the NE/4 of SW/4 of Section 3, T.4N. R.17W., which is about half a mile north of Site 484 east of the same ridge. Features include a three-room rock house, a corral, a chicken coop, a couple of other structures, and horno, a woodpile, scattered trash, and a thin scatter of prehistoric sherds and lithics. The house measures 14 m by 5 m and has a middle room with niche and masonry fireplace. A cupboard still stands in one of the end rooms. The corral fence combines split rails and wire on posts and encloses an area of 50 m by 50 m. The chicken coop, built of logs and plywood, is in a corner of the corral. In the middle of the corral is a rectangular structure, the same size as the house, made of rocks, brush, and boulders, and open on one side.

Trash seems to have been scattered mainly behind the house. It includes the chassis of a pre-1930 car, a bedstead, a wooden table, barbed wire, a car wheel and tire, a "bike-like" (probably early model car) fender, stove pipe, car parts, cans, and glass (clear, blue, purple). There is also a lot of burned rock, possibly clinker from the burning of coal, and a tin bird house.

On the basis of the map location and archeological description, several interviewees said that Site 485 was the Jose Martinez homesite. Interviewees included Jose's son, Nick, and Nick's son, Louis, who also visited the site with the author. Jose Martinez was the son of David Martinez of Atarque, whose WWI-era homestead nearby was described previously (see Resources Indicated by Interviewees, Dwelling Sites). In 1919, soon after David Martinez must have filed on his land Richard K. Brown filed on Section 3 (SF 035676), but relinquished the next year. Chaves A. Harris was next to file, in 1921 (SF 043407), but relinquished in 1926. The Harris family is now based in Concho or St. Johns, Arizona.

One or more of these previous users might have built the house at Site 485, which Nick Martinez suggests may have been there when his father settled on the site in 1929. The Final Proof testimony says that he settled on the



land in April of 1930 with his wife and five children; it also corroborates his son's notion that the house was already there. Jose Martinez filed on the section at this time. Two years later, he petitioned the General Land Office to change his homestead entry to a tract north of Atarque. The GLO denied his petition, however, because the land was in the Zuni Reservation. Martinez received the patent (Pat. 1081633) to Section 3 in 1936.

Nick Martinez grew up on Site 484 and added more details to the archeological description of the site. At some point, his family remodeled the fireplace in the house to accommodate a stove, then poked a hole in the back of the fireplace so that the cat could get in and out. In 1944, his father replaced the pole-and-dirt roof with one of tin. The rock-and-pole structure inside the corral was the base of a fence inside which feed was stored. Besides the chicken coop, the corral encompassed a small, pen-like corn crib. The Final Proof testimony offers a less detailed inventory: a rock house, pole corral, pole chicken house, and pole toilet.

The Martinezes raised cattle and farmed a field west of their house, north of Emilio Lusero's field (SW/4 of NW/4 of Section 3, T.4N. R.17 W). They got their water from a windmill on their homestead. On the mesa top west of Lusero's homestead, young Nick Martinez used to catch eaglets, which he sold to the Zunis. The Martinez family also looked for arrowheads in the lithic scatter on the mesa top west of their house and in the surrounding ruins.

In 1947, Jose Martinez sold his homestead to Pat Brannan and moved to Gallup, leaving furniture in the house. Brannan soon sold the land to Fletcher Green, who had bought the old Moore place in Techado in 1942 (see Resources Indicated by Interviewees). The Greens never lived in the house, but they did camp on the site (and possibly stayed in the house) when they were branding the cattle they kept in the vicinity. They recalled digging coal on the site to keep their outdoor campfire going at night. Recording of artifacts by provenience within the site, and of more datable information on them, might have revealed evidence of this later, different type of use. Such recording might also have indicated

a separate episode of occupation before Jose Martinez that both the purple glass and Nick Martinez's memories suggest.

## Site 497

Site 497 (LA 48080) is a 1930s homesite situated on top of a low ridge in the middle of open alluvial flats in the SW/4 of NW/4 of Section 5, T.3N. R.16W. The site includes a one-room rock house; a post-and-rail corral with a picket corral and small rock wall nearby; an isolated low rock wall; a large post-and-wire corral with four cells; a rock storeroom dug into the rock outcrop; a possible pen against the same rock; and a big concentration of trash downhill from the house (see Figure 4.6). The stonework and heavy roof timbers resemble those of Site 323, the Killen School (see above), and Site DCA-83-480, the Ellis Killen homesite (see Resources Recorded by Previous Archeological Surveys).

Hundreds of artifacts litter the site, but only those in the concentration near the house and a couple of items near the store room are mentioned. Downhill from the storeroom are broken earthenware and an oil or kerosene drum. Items near the house include milk glass cold-cream jars; strip-key-opened cans and lids (mostly coffee); one purple glass bottle base; other sherds of aqua, brown, green, and clear glass; a clear glass jar base with the Hazel-Atlas trademark of 1920-1964; a RADIANT ROAST coffee can lid; a CLABBER GIRL baking powder can lid; milk cans; tobacco tins; a zinc canning jar lid; a blue VICK'S VAPORUB jar; and lids from paper-body oil cans. The fact that the majority of the glass is clear and most of the cans are of the sanitary-seal type indicate that most use of the site occurred after 1930. The absence of coffee cans of the strip-key type and pull-tab cans indicates abandonment before the early 1960s. The purple and aqua glass sherds, however, suggest some use of the site before World War I. The large, four-celled, post and wire corral may have been built later, for it is set apart from the rest of the site.

Interviewees used map location, the author's verbal descriptions, and the archeological description to identify the site as the home of Joe Killen (presumably the same as William J.

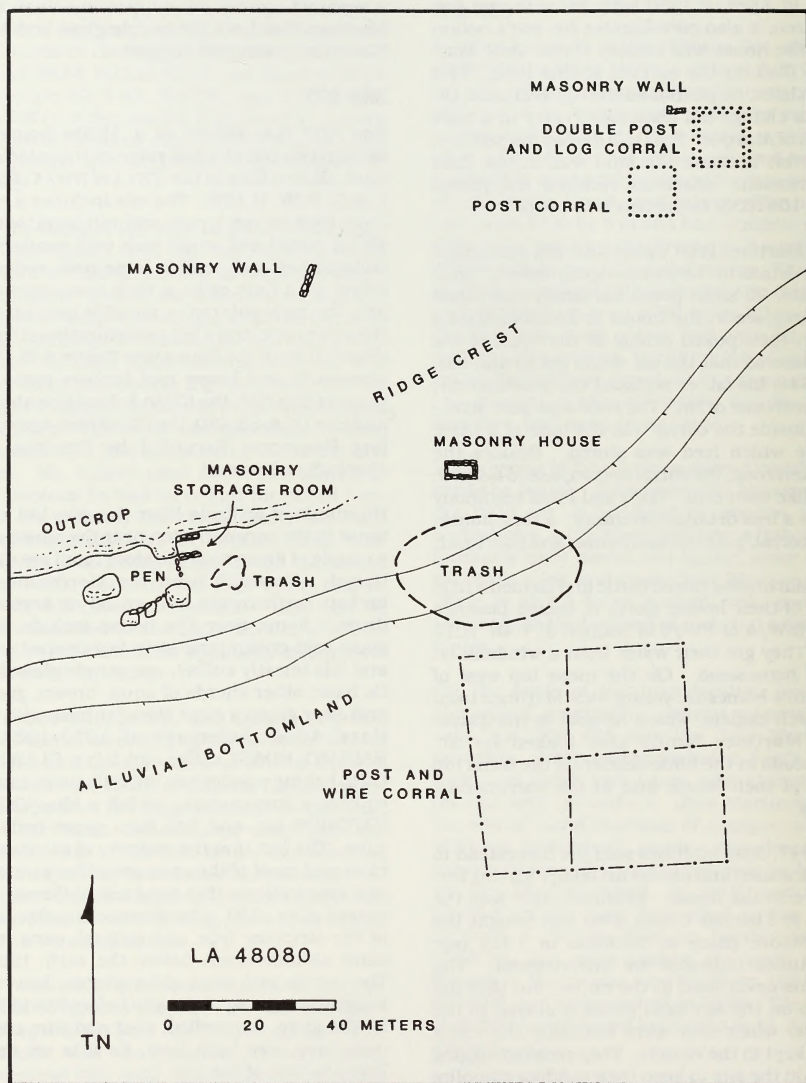


Figure 4.6: LA 48080 (Field No. 497), Joe Killen homestead.



Killen, of whom no one had ever heard). Other members of this family and their neighboring homesteads have been mentioned repeatedly above. Joe Killen was a bachelor who arrived with the rest of his family in 1931. He filed on the entire section around Site 497 in September of that year, but did not build a house until February of 1932, according to his Final Proof testimony. The house was of rock in the S/2 of N/2 of the section. He also built a post coral 60 by 70 feet. The next year he built two dams, one 150 feet long near the homesite and one 40 feet long in Lot 4. In 1934, he built a dirt tank near the homesite and in 1935 had a well drilled to 105 feet; in 1936, he installed a windmill and also built a "saddle" house. He had boundary and cross fences of wire, 100 acres planted with corn and beans, and 6-20 head of cattle and horses. In 1942, as previously mentioned, he and his brother ran afoul of the law and sold their land to the Hubbell Company. Joe Killen would have abandoned Site 497 at that time.

### Site 498

A solitary adobe house that perhaps dates to the 1930s is the only feature on this site (LA 48081). It stands in the middle of a small clearing northeast of Cerro Tinaja in the SW/4 of SE/4 of Section 20, T.3N. R.16W. (in the vicinity of the Mangum Ranch). The house measures about 7 m by 7 m and once had a wood porch and floor. Two walls still stand to almost full height, but the roof is gone.

Artifacts scattered near the house include milled lumber, wire nails, and the legs of a cast-iron stove. Under a tree, perhaps 20 m south of the house are a few sherds of stoneware and cans, both sanitary-seal and stamped-ended (presumably spot- or cap-soldered) types. These artifacts, particularly the mix of can types (if they are indeed contemporary with the house) suggest an occupation in the late 1920s or early 1930s, and a short one at that. Interviewees identified the site from its map location, verbal description, and photographs. The "adobe shack" belonged to a son-in-law of the Wootens (see Sites 256 and 500). After the Wootens left in the early 1930s, he lived in Quemado most of the time, where he died of tuberculosis. The interviewees did not know man's name.

The first person to file on the land was Thomas Ervin Gray. Since he filed in 1918 and relinquished in 1922, his tenure would be too early for the site. The next entry person was Henry Teubel of Lubbock, Texas, a naturalized citizen from Germany who filed on October 10, 1930, and moved to the land in March of 1931 with his wife and two children, where they camped while building a house in the SE/4 of Section 20. This house is clearly the one at Site 500 and is discussed below. Since the interviewees identified Site 500 with the Wootens, perhaps Henry Teubel was somehow linked with them, maybe as a son-in-law. He probably was not the one who died of tuberculosis in Quemado, however, for he seems to have returned to Lubbock after proving up (see below).

One interviewee had heard that the "adobe shack" had been a school. One of Teubel's witnesses to his Final Proof, Thomas Walker, said that he helped build a school house on Teubel's land. Since Walker did not arrive until 1931 (see Site 321), the schoolhouse would postdate that time. If Site 498 was this schoolhouse, as seems likely, perhaps it functioned only for a year or two, then sheltered the Wootens' tubercular son-in-law briefly.

### Site 500

This large picket-wall house with its heavy shake roof (LA 48083, Figure 4.7) stands in a clearing almost within shouting distance of Site 498. Although stripped of much of its interior details, the 12 m by 10 m house clearly had at least two rooms, and three heating devices: a rock fireplace and two stoves through holes in opposite sides of an adobe chimney. Just east of the house is a small earthen mound. Posts for a post and wire fence demarcate a yard around the house, outside of which are several other features. Another fenced yard (probably for livestock) east of the house encloses a small (perhaps 1.5 m by 1.5 m) rock foundation (perhaps for a corn crib) and two recent hearths prepared with rocks robbed from the foundation. West of the house lies a collapsed picket pen of cedar twigs and barrel strapping much like one observed on Site DCA-83-480 (see Sites Recorded by Previous Archeological Surveys). At odds with the imposing house is the extreme scarcity of

artifacts. Scattered around the house are a piece of aqua glass, a lard bucket, a canning jar lid, and a shaving cream can. Aluminum pull-tab pop and beer cans with labels still legible were dumped near one of the recent hearths, which also contained fresh charcoal. These cans and the shaving cream can clearly postdate the pre-World War I episode that the aqua glass suggests.

This house like Site 498 is on Henry Tubel's homestead. The aqua glass suggests that it might date to the tenure of the first homesteader, Thomas Ervin Gray. Interviewees, however, said that the house belonged to the ill-starred Wootens, who lived there for a short time in the early 1930s. Their little boy died of appendicitis and is buried in the Sunnyslope Cemetery. They evidently moved away soon afterwards, leaving their daughter to marry Kay Mangum, and their son-in-law to die not long afterwards of tuberculosis.

The house also clearly belonged to Henry Teubel, who said in his Final Proof testimony that in 1931 to 1932 he built a house of pickets about 40 by 45 feet with a shingle roof in the SE/4 of Section 10, T.3N. R.16W. In 1932, he built a corral of woven or barbed wire around the house and put in a one-acre gar-

den. He started a dam around a large lake in the SW/4 of the section in 1934-1935. He ran "work stock and milk cows, and steers" on the land. The family actually lived on the homestead for only three periods: March through November of 1931 (when they were building the house and presumably camping nearby); April through October of 1932; and May through September of 1934. After that they were "just in and out." Their absences were for work and schooling. In 1936, they turned the house into a barn, built another wire corral next to it, and started a second house of lumber. After his Final Proof in February 1936, Teubel evidently moved his family back to Lubbock, because he later wrote to the General Land Office on stationery of the Lubbock Poultry and Egg Company.

Teubel must have had some connection with the Wootens, but what kind is not clear. The Wootens seem to have arrived in the middle of Teubel's tenure; Edna Wooten did not file on her land until 1932, and when she did, she included a receipt for the filing fee on a newly rejected homestead application in the name of Christopher Wooten of McAlister, New Mexico. McAlister is in Eastern New Mexico in the general vicinity of Lubbock, but the two towns are not close.



Figure 4.7: The Wooten house, a picket-wall structure with heavy shake roof at Site 500.



## Analysis of the Historic Site Component Sample

### General Site Characteristics

#### Site Types

The 19 historic site components that the survey recorded fall into two general types, structural and nonstructural. Structural sites as defined above are those with rooms, and correspond to dwelling sites in the ethnographic typology of Chapter 3.

The sample includes 12 structural sites. All other sites (seven) are nonstructural sites: two corrals with hearths (one hearth may be prehistoric); a hearth and trash deposit; a drift fence; a fence (possibly boundary marker) with petroglyphs; a cairn (another possible boundary marker) with petroglyphs; and a stock dam.

#### Feature Types

Table 4.1 lists the numbers of structural features and of various types of nonstructural features among the 19 historic site components.

The most common nonstructural features are corrals and pens (the one type of nonstructural feature that outnumbers structures), trash deposits, windmills, ovens, hearths, outbuildings, and water tanks.

Less common features include a privy, a dog's grave, salt licks, petroglyphs, a cairn, fences (boundary, drift, and dooryard), wells, and so forth.

#### Room Construction

Most of the 14 structures in the 19 sample site components have only one room (Table 4.2). The largest structure has five. All rooms, and all but the five-room structure, are rectangular.

Rock is the most common construction element (five structures) followed by log (four); adobe (two and one-half) and jacal (one and one-half) — one of the adobe structures has a jacal room; board and batten (one); and unknown (one).

## Spatial Distribution /Site Components

### Site Types

The physiographic surroundings of each historic site component are tabulated on Table 4.3. Environmental zone refers to the four topographic zones (A-D) into which Camilli divided the three survey sectors in the Moderate Production Area and then stratified the sample (see Part I discussion of general survey methodology). Terrain and vegetation refer to categories listed on the Museum of New Mexico Laboratory of Anthropology site survey forms. The table also shows the altitude of each site and the direction to which it is exposed, as well as whether prehistoric materials are present.

All historic components are situated in Zones C (foothills and ridges, 6 to 20 percent grade) and D (areas around drainages, less than six percent grade). Historic inhabitants of the survey quadrats shunned the steep talus of Zone B and the tops of mesas or ridges of Zone A (Table 4.4). Nonstructural sites are entirely confined to Zone C, whereas structural sites appear in both zones. The distribution of historic components according to terrain seems to reflect this preference for relatively flat, accessible places (Table 4.5). More specific locational patterns on the terrain are not evident because the number of possible types of terrain exceeds the number of components of each type.

Both structural and nonstructural components tend to be situated in wooded country, rather than in scrub or grassland (see Table 4.6). Structural components tend more strongly than nonstructural components toward the piñon-juniper park, the most sparsely wooded of the tree zones. Both structural and nonstructural components fall within the same altitude range (6,730-7,060 feet). Fourteen of the 19 components have exposures somewhere within an arc from north-east through east to south. Structural components are more likely to have exposures in this range than are nonstructural ones. Almost half (nine) of the components occur together with prehistoric materials. Nonstructural components seem more likely to occur with prehistoric materials than are structural ones.

Table 4.1: Features on Historic Site Components

Site No.	Structures	Pens/corrals	Trash	Wind-mills	Ovens	Hearths	Out-buildings	Water tanks	Other	Total
242	-	-	1	-	-	1	-	-	-	2
256	1	-	-	-	-	-	-	-	-	1
259	1	1	-	-	-	-	-	-	-	2
269	-	1	-	-	-	1(?)	-	-	-	1-2
271	1	2	1	1	-	1	2(?)	2	5	15
282	-	-	-	-	-	-	-	-	3	3
315	-	-	-	-	-	-	-	-	1	1
320	1	-	-	-	-	-	-	-	-	2
321	-	-	-	-	-	-	-	-	2	2
323	1	-	-	-	-	-	-	-	-	1
331	-	-	-	-	-	-	-	1	-	1
465	2	1	1	1	-	-	-	1	1	7
466	1	-	1	-	-	-	-	-	-	2
482	-	1	-	-	-	1	-	-	-	2
484	1	1	1	1	1	-	1	-	1	7
485	1	1	1	1	1	-	3	-	-	8
497	2	7	1	-	-	-	1	-	1	12
498	1	-	1	-	-	-	-	-	-	2
500	1	1	-	-	-	2	1	-	1	6
<b>Total</b>	<b>14</b>	<b>16</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>5-6</b>	<b>8</b>	<b>4</b>	<b>16</b>	<b>77-78</b>

Table 4.2: Construction of Structures on Historic Site Components

Site No.	Struc. No.	Total Rooms	Constr. Elements	Constr. Type	Ground Plan	Maximum Dimen.(m)	Area (sq.m)
256	1	1	Rough logs	Log	Rect.	5x5	25
259	1	1	Slabs	Compound masonry	Rect.	5x4	20
271	1	5	Rough logs	Log	Irreg.	25x8	200
320	1	1	Unknown	Unknown	Rect.	3x3	9
323	1	1	Irr. blocks	Compound masonry	Rect.	12x7	84
465	1	Unknown	Logs(?)	Unknown	Unknown	Unknown	Unknown
	2	2	Brd/bat/bark	Frame	Rect.	Unknown	Unknown
466	1	1	Adobe	Adobe	Square	4x4	16
484	1	2	Adobe & jacal	Adobe, jacal	Rect.	6x3	18
485	1	3	Irr. blocks	Compound masonry	Rect.	14x5	70
497	1	1	Irr. blocks	Compound masonry	Rect.	7x4	28
	2	1	Irr. blocks	Compound masonry	Rect.	3x2	6
498	1	1	Adobe	Adobe	Rect.	8x8	64
500	1	4	Jacal	Jacal	Rect.	13x10	130

Table 4.3: Historic Site Components and Physiography

Site No.	Site Type	Env'l Zone	Terrain	Vegetation	Altitude	Exposure	Prehist. Present
242	Nonstr.	C	Hill slope	Scrub	6,740	N	yes
256	Struc.	D	Hill slope	P-J park	6,940	S	
259	Struc.	C	Hill slope	P-J wood	6,790	E	
269	Nonstr.	C	Ridge	P-J wood	6,830	S	yes
271	Struc.	C	Ridge	P-J park	7,060	S	yes
282	Nonstr.	C	Hill slope	P-J park	6,820	E	yes
315	Nonstr.	C	Arroyo/wash	P-J wood	6,920	NE	
320	Struc.	D	Flood/valley	Grassland	6,880	360	
321	Nonstruc.	C	Ridge	J-P wood	6,820	360	
323	Struc.	D	Canyon floor	P-J park	6,920	S	
331	Nonstruc.	C	Ridge	P-J park	7,060	S	yes
465	Struc.	D	Plain/flat	Scrub	6,830	NE	
466	Struc.	D	Hill slope	P-J park	6,860	E	
482	Nonstr.	C	Arroyo/wash	P-J wood	6,835	SW	yes
484	Struc.	C	Ridge	P-J park	6,800	NE	
485	Struc.	D	Arroyo/wash	P-J wood	6,830	SE	yes
497	Struc.	D	Ridge	P-J park	6,730	NW	
498	Struc.	C	Ridge	P-J park	6,920	SE	yes
500	Struc.	C	Plain/flat	P-J park	6,910	S	



**Table 4.4: Historic Site Type Versus Environmental Zone.**

<b>Environmental Zone</b>	<b>Structural</b>	<b>Non-Struct.</b>	<b>Total</b>
A	-	-	-
B	-	-	-
C	5	7	12
D	7	-	7
<b>Total</b>	<b>12</b>	<b>7</b>	<b>19</b>

**Table 4.5: Historic Site Type Versus Terrain**

<b>Terrain</b>	<b>Structural</b>	<b>Non-Struct.</b>	<b>Total</b>
Arroyo/wash	1	2	3
Flood/valley	1	-	1
Plain/flat	2	-	2
Canyon floor	1	-	1
Low rise	-	-	-
Ridge	4	3	7
Saddle	-	-	-
Talus base	-	-	-
Cliff/scarp	-	-	-
Mesa	-	-	-
Hilltop	-	-	-
Hill slope	3	2	5
Talus	-	-	-
<b>Total</b>	<b>12</b>	<b>7</b>	<b>19</b>

**Table 4.6: Historic Site Type Versus Vegetation**

<b>Vegetation</b>	<b>Structural</b>	<b>Non-Struct.</b>	<b>Total</b>
Grassland	1	-	1
Scrub	1	1	2
P-J park	8	2	10
P-J wood	2	3	5
J-P wood	-	1	1
<b>Total</b>	<b>12</b>	<b>7</b>	<b>19</b>

### Feature Types

The numbers of features of most types listed above are too small for meaningful analysis; therefore, only the most common types have been tabulated: structures, corrals, trash, hearths, and outbuildings. The distribution of structures has already been discussed, since structural features define the structural site

type. Table 4.7 illustrates the distribution of each of the remaining four feature types across environmental zones, Table 4.8 their distribution across terrain, and Table 4.9 depicts their distribution across vegetation zones. Since both structural and nonstructural components are distributed similarly across the zones, and since the various types of nonstructural features (except outbuildings) appear on both structural and nonstructural components, the spatial distributions of these features simply parallel the distributions of site types.

### Distribution of Site Components Through Time

Although they number only 19, the historic site components may embody as many as 29 distinct episodes of use, including episodes of the present. An episode of use is a distinct period of time separated from earlier or later periods by either abandonment or a change in function. These episodes are described above for each site and are tabulated below. While all episodes of use on a nonstructural site must be classed as nonstructural, not all episodes of use on a structural site necessarily involved the structures there. Consequently, the majority of the 19 site components are structural, but most (16 out of 29) episodes of use are nonstructural.

Table 4.10 shows the time periods, according to strictly archeological evidence, in which these episodes of use seem to fall. About a third of the episodes are undated. Most are nonstructural, as one would expect since nonstructural sites tend to have few or no datable artifacts in association. Of the datable episodes, almost half fall into the period 1930-1950. These episodes are overwhelmingly structural, in contrast to those of earlier and later periods.

The number of features of each type in each period will not be analyzed here. The exercise would be futile because of the small number of most types of features; the equal tendency of most types to occur on both structural and nonstructural components; and uncertainty about the use episode(s) in which certain features on some components belong.

Table 4.7: Historic Feature Types Versus Environmental Zone (number of features)

Environmental Zone	Corrals	Trash	Hearths	Out-buildings	Total
A	-	-	-	-	-
B	-	-	-	-	-
C	7	4	5-6	4	20-21
D	9	4	-	4	17
<b>Total</b>	<b>16</b>	<b>8</b>	<b>5-6</b>	<b>8</b>	<b>37-38</b>

Table 4.8: Historic Feature Types Versus Terrain

Terrain	Corrals	Trash	Hearths	Outbuildings	Total
Arroyo/wash	2	1	1	3	7
Flood/valley	-	-	-	-	-
Plains/flat	6	1	2	1	10
Canyon floor	-	-	-	-	-
Low rise	-	-	-	-	-
Ridge	7	4	1-2	4	16-17
Saddle	-	-	-	-	-
Talus base	-	-	-	-	-
Cliff/scarp	-	-	-	-	-
Mesa	-	-	-	-	-
Hilltop	-	-	-	-	-
Hill slope	1	2	1	-	4
Talus	-	-	-	-	-
<b>Total</b>	<b>16</b>	<b>8</b>	<b>5-6</b>	<b>8</b>	<b>37-38</b>

Table 4.9: Historic Feature Type Versus Vegetation

Vegetation	Corrals	Trash	Hearths	Outbuildings	Total
Grassland	-	-	-	-	-
Scrub	1	2	1	-	4
P-J park	11	5	3	5	24
P-J wood	4	1	1-2	3	9-10
J-P wood	-	-	-	-	-
<b>Total</b>	<b>16</b>	<b>8</b>	<b>5-6</b>	<b>8</b>	<b>37-38</b>



**Table 4.10: Dates of Episodes of Use on Historic Components**

<b>Period</b>	<b>Total Episodes</b>	<b>Struc.</b>	<b>Non-Struc.</b>
ca. 1900-1920	2	1	1
1920-1930	2	1	1
1930-1950	9	8	1
1950-present	6	1	5
No date	10	2	8
<b>Total</b>	<b>29</b>	<b>13</b>	<b>16</b>

### Comparison of Ethnographic and Archeological Data on Sample Site Components

Table 4.11 tabulates ethnographic data on 10 of the 19 site components from which some ethnographic information was gathered. Table 4.12 tabulates comparable information on all 19 components from purely archeological evidence; it also lists each episode of use evident archeologically at each component. Sites identified ethnographically are all structural, a bias that reflects the author's data-gathering procedures. Interviewees identify structural sites more readily than nonstruc-

tural ones on the basis of descriptions and photographs; visits to nonstructural sites are usually necessary for unambiguous identification but were difficult to arrange within the time limits of the project; therefore, more time was devoted to identification of structural components by the interviewees. Homestead proof records also offer information on structural sites but rarely on nonstructural ones.

A comparison of Tables 4.11 and 4.12 shows that ethnographic and archeological sources generally agree on the dates of the major (structural) episode of use at each component. Archeological observations picked out more episodes of use on these components than ethnographic sources revealed, a difference due in part to the interviewing strategy.

When one visits a site with someone and asks him or her to identify individual features, the person will usually reveal more episodes of use than he or she will mention in interviews away from the site. Often, in fact, the person identifies more use episodes than the archeologists. In addition, interviewees also mentioned nonstructural use episodes on Site 485 that the archeological survey crew failed to detect; documents and interviews indicated multiple structural episodes on sites 498 and 500 that were not detected archeologically.

**Table 4.11: Ethnographic Data on Historic Site Components**

<b>Site No.</b>	<b>Use Episode</b>	<b>Date</b>	<b>Function</b>	<b>Ethnicity of Users</b>
256	1	1930s	Homesite	Anglo
271	1	1930-44	Homesite	Anglo
320	1	1910-25(?)	Line camp(?)	Anglo(?)
323	1	early 1930s	School	Anglo
465	1	1918-30(?)	Homesite(?)	Anglo(?)
484	1	1932-43	Homesite	Hispanic
485	1	1920s(?)	Homesite	Anglo(?)
	2	1929-47	Homesite	Hispanic
	3	1950s	Camp	Anglo
497	1	1931-42	Homesite	Anglo
498	1	early 1930s	School?	Anglo
	2	early 1930s	Homesite	Anglo
500	1	1932-36	Homesite	Anglo
	2	1936	Barn	Anglo

**Table 4.12: Archeological Data on Historic Components Comparable with Ethnographic**

<b>Site No.</b>	<b>Use Episode</b>	<b>Date</b>	<b>Function</b>	<b>Site Type</b>
242	1	ca. World War I	Campsite	Nonstruc.
	2	ca. 1930?	Campsite	Nonstruc.
256	1	1930s	Dwelling site	Struc.
259	1	1930s	Dwelling site	Struc.
269	1	n.d.	Corral (& hearth?)	Nonstruc.
271	1	1930-50	Dwelling site	Struc.
	2	Present	Stock water	Nonstruc.
282	1	n.d.	Boundary fence	Nonstruc.
	1 or 2?	1921	Petroglyph	Nonstruc.
315	1	n.d.	Drift fence(?)	Nonstruc.
320	1	Pre-World War I	Dwelling site	Struc.
321	1	n.d.	Boundary (?) cairn	Nonstruc.
	1 or 2?	n.d.	Petroglyphs	Nonstruc.
323	1	n.d.	Dwelling site	Struc.
331	1	n.d.	Dam	Nonstruc.
465	1	1930s	Dwelling site	Struc.
	2	1950s	Dwelling site	Struc.
	3	Present	Stock water	Nonstruc.
466	1	n.d.	Dwelling site	Struc.
	2	1960s	Trash	Nonstruc.
482	1	n.d.	Corral (& hearth)	Nonstruc.
484	1	1930s	Dwelling site	Struc.
485	1	1930s	Dwelling site	Struc.
	2	Present	Windmill	Nonstruc.
497	1	1930-50	Dwelling site	Struc.
	1 or 2?	n.d.	Corral	Nonstruc.
498	1	ca. 1930	Dwelling site	Struc.
500	1	1920s?	Dwelling site	Struc.
	2	1970s	Hearths	Nonstruc.

A comparison of features according to their functions as inferred by archeologists and identified by interviewees is not possible here, due to a lack of time for visits to sites with interviewees for the reliable identification of features.

Maps of two sites (484 and 485) were studied with former inhabitants, who found that the archeological identification of features were impressively accurate.

If site visits with these people had been made, they would doubtless have pointed out other features not recorded archeologically; if other sites had been visited with different people, some contradictory identifications would have also emerged.

A comparison between archeologically recorded features and those listed in Final Proof testimony is possible (Table 4.13). The five structural sites unambiguously identified with homesteaders during the proving-up period have been added to six more sites from earlier surveys for the following analysis.

The proof files tend to neglect minor features like hornos, privies, and small pens recorded archeologically. The archeological surveys consistently agree with the proof files in regard to structures (houses and storerooms) and almost as consistently, corrals. They are more haphazard in recording (or identifying correctly) barns, chicken coops, other outbuildings, and water places.



Ethnographic data also bear on room construction. During the survey, archeologists in the field raised the question of whether room construction unambiguously reflects the ethnicity of the residents.

Some observers tend to assume that Anglos built rooms of logs or board-and-batten,

whereas Hispanos used adobe or rock. As Table 4.11 shows, only two structures in the survey sample were built by Hispanic families; one is rock, the other jacal (one room) and adobe (a second room). Those that Anglos built include all the ethnographically identified log and board-and-batten houses, but also include adobe, rock, and jacal.

**Table 4.13: Historic Features Recorded Archeologically and in Final Proof Testimony**

Site No.	Features accd. to Final Proof	Features recorded Archeologically	Site No.	Features accd. to Final Proof	Feature recorded Archeologically
271	4-rm log house dugout 2 corrals well & windmill	4-rm log house dugout 1-2 corral areas windmill	DCA-83-299	1-rm log house log chicken house log barn fenced garden (wire)	log cabin - - -
Unk. #	hay barn icehouse/garage veg. garden stock sheds -	- - fenced side yard 2 outbuildings privy	- - -	- - -	root cellar corral rock fence
			DCA-83-	rock house rock storehouse	rock bldg 7 x 10 m root cellar
484	house barn shed 1 corral - -	2-rm house - rock outbuilding 1 corral fenced area homo	480	rock barn 3 picket corrals  fenced garden well - -	rock barn* 1 or more corral areas* fenced house yard* - rock bldg 3 x 6 m rock outbldg (crib?)
485	rock house pole corra 1 pole chicken house pole toilet - - -	3-rm rock house pole corral  chicken coop - pen or crib encl. in corral homo	DCA-83-488	- "residence" dugout - garden windmill	picket pen* 1-rm cabin root cellar 3 corrals - -
			BLM	3-4 rm house	6 x 5 m rock house
497	rock house post corral 60 x 70 ft. windmill saddle house - -	1-rm rock house 2 post/picket corrals @ 13 x 13 m - rock storeroom 2 rock walls 4-cell post/wire corral (later)?	175	well corral barn - -	cistern or well - - rock-lined feat 2x2 m root cellar? gr
			BLM 176	3-4 rm house barn corral	6x4 rock house rock align. 12x6 m -
500	picket house 40 x 45 ft 2 corrals  1-acre garden - - lumber house (maybe not near other features)	picket house 10 x 12 m 1 corral, 1 front yard - shed or corn crib picket pen -	BLM 180	well  rock house pole corral water trough - well	rock house - - 4 rock structures well

## Integration of Data from SACA Survey and Other Sources

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The sample of historic sites in the San Augustine Coal Area Survey is so small that the patterning in it may well result simply from sampling error, rather than from natural or social processes that affected the sites. The extensive historical background developed in previous chapters in this volume can help one see how plausible the patterning is in the sample. The historical background also suggests explanations that future researchers might test.

A cautionary note: Even if the survey sample were large enough to represent the three survey areas adequately, it would not necessarily represent the entire Homesteading Study Area/Moderate Production Area, let alone the SACA. The reason is that the three survey areas do not encompass a representative collection of landowners. The most obvious source of bias is that the three areas lie outside the strip of state land along Nations Draw where the Garcia, Nations, and Hubbell outfits were concentrated.

The three survey areas favor land homesteaded under the Stock Raising Homestead Act, which, together with a law of 1910, allowed the federal government to retain the mineral rights and land that has remained public domain because no one wanted it. Therefore, sites that the large ranching operations left will be under represented, whereas those that homesteaders left, especially after the Stock Raising Homestead Act, will be over represented.

### Site Types

Structural site components outnumber non-structural components in the Quadrat Survey sample. Structural sites outnumber non-structural sites by an even greater proportion in the group of sites that interviewees recalled. This group is likely to be a biased sample because people are more apt to remember, or consider worth mentioning, places where people lived rather than isolated camps or special-purpose facilities. The only archeological surveys that systematically recorded historic

sites, the drill-hole and right-of-way surveys and the BLM San Augustine Coal Area survey, recorded more nonstructural than structural sites (a ratio of 7 to 4 in the drill-hole surveys, 13 to 4 in the Transect Survey). These surveys are as prone to sampling error as the survey.

The BLM survey did not cover enough ground to record sufficient number of sites for a representative sample, and the drill-hole and right-of-way surveys were not designed to cover representative pieces of land. Consequently, differences among the results of surveys may reflect sampling error.

Historical processes can also account for differences in the ratios of nonstructural to structural sites in the various survey samples. The drill-hole and right-of-way surveys are concentrated in the Garcia-Nations-Hubbell range; therefore, one might expect more non-structural sites in the form of herders' camps and range-use facilities. Most of the survey tracts are west of Tejana Mesa along the Largo, where seasonally transhumant, small-scale Hispanic sheep and cattle ranchers settled.

The number of nonstructural sites in the SACA survey is inflated by the large number of small corrals like those used during lambing. One might expect more nonstructural sites relative to structural ones here than on land where Anglo homesteaders settled because the Anglos did not raise sheep and needed few facilities for the cattle they kept on their small parcels.

That the SACA survey sample includes a much lower proportion of nonstructural sites than the samples of sites recorded by the other surveys may reflect differences in settlement history and land tenure in the different areas.

### Feature Types

The types of features identified by the SACA survey are much the same as the types that other sources indicated. The SACA inventory, however, failed to identify certain broad categories of features that, according to other sources, exist in SACA and the Homesteading Study Area/Moderate Production Area: Hispanic or Anglo public or community facilities; graveyards or graves; and features



typical of Native Americans (hunting facilities, salt trail shrines, piñon-picking and other camp sites, and early Navajo dwellings).

The lack of public and community facilities is more apparent than real, of course, for interviewees identified two structures in the sample as schoolhouses. The question of how one can distinguish public structures from private dwellings then arises. A more careful recording of artifacts associated with each structure might help. One would not expect to find the volume or variety of domestic trash around a public structure that one would expect around a house.

The schoolhouses in the sample contrast with most dwellings in the sparseness of trash around them. At least one dwelling, however, is equally devoid of trash, and one of the schoolhouses was also identified as a dwelling. Artifacts alone do not offer unambiguous information about function.

The lack of graveyards and graves in the survey sample is not surprising. Other sources suggest that these features are relatively rare, and that at least some residents of the Homesteading Study Area/Moderate Production Area buried their dead in graveyards outside SACA.

The absence of Native American features is more problematic. The salt trails evidently do not cross the three survey areas, and Navajo dwellings may be too rare to appear in a 10 percent sample inventory, though one would expect some hunting facilities and campsites, for piñon-picking, at least, in a larger sample. Such sites may also be concentrated in uplands on top of Santa Rita Mesa, elsewhere above the rim, and along the Continental Divide on the eastern edge of San Augustine Coal Area. The three survey areas barely penetrated these localities.

## Room Construction

People seem to have used the same range of materials and construction methods in building the rooms in the SACA survey sample that others used elsewhere in the region.

Historical sources, as noted, suggest that people perhaps favored horizontal log, jacal, or

board-and-batten construction in rooms that they needed to build quickly or for short-term occupancy. This evidence might help explain another possible trend, that of the Anglo homesteaders to use horizontal log, jacal, and board-and-batten construction more than did Hispanic families, who were more certain of staying on the land because of their local ties and early access to reliable watering places.

The survey sample is not big enough to test the correlations between room construction and ethnicity, or the explanation for the correlation proposed here. These questions remain for future research. The survey sample does show, however, that members of neither group rigidly employed only the type of construction they supposedly preferred.

Other aspects of construction might be more closely correlated with ethnicity. For example, one would expect niches only in Hispanic homes, since local Catholics were mainly Hispanic; one would expect corner fireplaces only in Hispanic homes, since Anglo homesteaders probably would not have learned the traditional way of making them. Such construction details in a house would suggest that its inhabitants were Hispanic, but the absence of these details would not suggest the contrary.

Also worth noting in the future might be the patterning in the use of new and mass-produced building materials as opposed to salvaged or naturally available materials. One would expect more of these materials in rooms built by poor people, rooms used for short or infrequent stints, and rooms built in early times when the region was relatively isolated from heavy trade.

## Spatial Distributions of Site Components

The absence of site components on mesa tops or steep slopes seems generally consistent with data from other sources. Historical sources indicate that people used mesa tops for pasturing livestock that they wanted to isolate, but did not necessarily "improve" the mesa tops for that purpose. The argument that people generally avoided both steep terrain and mesa tops is plausible, for both types of

land are difficult to traverse, especially in vehicles, and steep slopes are unstable for building. Facilities like the Cates drift fence show that people wanted to keep livestock out of rough country, where an animal could get lost or break a leg and die.

Structural components in the sample occur on both gentle slopes and bottomland, whereas nonstructural components occur only on gentle slopes, possibly to inhibit erosion. Sheet wash in the bottomlands can cover small features such as hearths and can break flimsy fences. Dwellings are the most likely to survive.

The tree zones where most of the recorded site components appear also seem to have harbored a large share of the sites identified by other sources. One possible reason is that the tree zones coincide with the topography where sites cluster. Trees do not grow in the bottomlands most prone to sheet wash. Trees also offer the shelter, shade, privacy, firewood, and building material that people needed for homes, camps, and special facilities.

The especially strong tendency of structural sites to appear in piñon-juniper parkland may reflect the desirability of living in the area between wooded and open country, where woodland thins into park. People found wood on one side for their own needs and open range on the other for their livestock.

Livestock raisers elsewhere in western New Mexico (Navajos) show a clear historical preference for similar topographic and vegetative zones, especially at the tree line, for similar reasons (Kelley 1982a).

The range of altitude within which the historic site components fall is probably correlated with the environmental zones and types of terrain in which they occur. Livestock raisers and farmers did not restrict themselves to this altitude range as seen by the settlements at higher elevations above the rim (Atarque, Fence Lake) and lower elevations along the state line (St Johns).

Historical components, especially structural ones, tend to be situated with easterly or southerly exposures, thus reflecting the need

for shelter from the prevailing westerly winds, for early morning light, and for the sun's warmth in winter.

Other livestock raisers elsewhere in western New Mexico (the Navajos, again) favor the same range of exposures, especially for dwelling sites, evidently at least partly for these reasons (Kelley 1982a).

The occurrence of a large portion of historic components with prehistoric components may be a result of sampling error; however, the pattern is evident in the other surveys. Several of the individuals interviewed offered some possible explanations: prehistoric structural sites are sources of building material; the factors that attracted prehistoric users to a natural situation (water, cultivable land, shelter from the wind) might also have attracted historic users.

The geographical sampling design is not suitable for analyzing the distribution of site components in relation to reliable water. Nevertheless, one would expect water to influence site distributions strongly, for it is probably the most scarce of the essential natural resource in the region.

The historical chronicle in Chapter 3 suggests that the settlement history of SACA and especially the Homesteading Study Area/Moderate Production Area parallels the development of water, with early settlement confined to places with natural water sources and aquifers that shallow wells could tap.

Early structural sites should be concentrated west of Tejana Mesa around Zuni Salt Lake, and along Santa Rita Mesa, whereas people could not live in Nations Draw (except near Garcia Spring and a couple of other spots) until after Nations and others drilled wells there.

A comparison of the dates of homesites recorded by the BLM survey concentrated on the area west of Tejana Mesa, and those recorded by the drill-hole and right-of-way surveys and the present sample survey concentrated on the Nations Draw and neighboring uplands, seems to reflect this proposed pattern.



## Distribution of Site Components Through Time

Episodes of use on the historic site components are concentrated in the period 1930-1950. Structural episodes are even more concentrated in that period. This distribution is not entirely consistent with the history of the Homesteading Study Area or even of the upper Nations Draw outside the Garcia-Nations-Hubbell zone where the three survey sectors were placed.

One would expect more episodes of use, especially structural ones, from World War I until the early 1920s, because of the land rush in the upper Nations Draw resulting from the Stock Raising Homestead Act and the war. The low incidence of pre-1930 episodes may be a result of sampling error or the fact that many homesteaders never built homesites. Dating does not seem to be at fault since interviewees confirmed archeological dates for virtually all structural episodes.

As is consistent with local history, the number of episodes of use between 1930 and 1950 exceeds later numbers, an indication that the region has lost population since World War II. Structural episodes are in the majority between 1930 and 1950, but not earlier or later. Land use reached peak intensity during the Depression, when the largest number of people tried to live off the smallest parcels of land. Their holdings were so small that the homesteaders could exploit them entirely from their homesites. They hardly needed campsites or facilities to use distant range, as earlier and later users did.

The strong tendency of people to reuse historic components is worth noting and trying to explain. The reasons may be similar to reasons for historic reuse of prehistoric components.

## A Methodological Experiment: The Martin Homesite

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Archeological observation and ethnographic information show that people reused more than half of the historic site components in the SACA. Later episodes of use were normally for different purposes than earlier ones, and later

users modified old features or built new ones. Moreover, as the proof files so clearly show, even within a given episode of use, not all features date from the same time.

Finally, as the comparison of proof-file data with archeological observations shows, one often finds it difficult to identify a feature after years of abandonment, salvage, and erosion. These processes of site formation clearly require archaeologists to make the feature, rather than the site, the unit of field observation. Yet field observations during both the present survey and previous archeological surveys have not consistently done so, especially in recording artifacts.

After the field work was done, it was decided to develop and test field methods for recording features of historic sites that would provide more information on each feature and would also be feasible within the time limits of most surveys.

The site chosen was the Arthur H. Martin homesite in the northern tip of SACA and south of Fence Lake. The site was selected because it (a) was visited earlier with a local resident, who told a little of its history and identified some of the features; (b) is large and complex enough to offer a wide range of recording problems on which to test our methodology thoroughly; and (c) is easily accessible from a gravel road.

## Field Recording and Analysis

### General Site Characteristics

The site's location and physiographic setting, management data, and general information on the cultural materials were recorded on the Museum of New Mexico, Laboratory of Anthropology, Archeological Records Management survey form.

### Mapping and Photographing

An east-west baseline was laid out through a conveniently placed quarter section marker and the recording team gridded the site into 5-m squares with compass and tape. All features were mapped into this grid, a more detailed map of each was made, then each feature was photographed.

## Recording of Artifacts

The goal was to piece-plot each artifact and record all the attributes that might indicate its function and date. Work in the first grid square, which was not even one of the most heavily littered, showed that this goal was unattainable. As a result, the feature in this grid square and two others in other squares were arbitrarily chosen; the artifacts on, in, and (in one instance) around them were recorded. The features chosen were a hearth, perhaps where trash was burned, a rock pile and dump, and a small log outbuilding that an interviewee had said was a store (here trash within 5 m outside the building was also recorded).

The observation of only a "sample" of the features did not provide adequate data for the site, but we were still committed to recording all the artifacts at individual features and could not do so on all features in the two days available for field recording.

The obvious consequence of the failure to accomplish the desired goal prompted the alternative recommended below. Piece-plotting was also abandoned and the feature numbers were assigned by location (distinctions were made between locations inside and outside the store).

The attributes of each artifact were recorded on a separate form, one for glass items, one for metal, and one for artifacts of other materials (Figures 4.8, 4.9, and 4.10). One could record

most of this information in one or two lines on a computer coding form or other columnar-ruled sheet by writing the numerical codes for each attribute in the block of spaces allotted for each variable.

A small amount of description was required and a rubbing or tracing of any potentially informative embossed or printed labels could be attached. It was decided not to use this more compact way of recording until field observations confirmed that the attributes listed with number codes were the most common. All artifacts were recorded and then left in place in case piece-plotting became desirable later. Instead of removing each artifact for dating and identification of function, only a sheet that listed its relevant attributes was removed from the site.

Basic resource books on historic artifacts, including many illustrated archeological reports from northwestern New Mexico, were used to determine the time period of each datable attribute recorded for each artifact and the possible functions indicated by these attributes. The artifacts at each feature were then tabulated according to general type, dates, basis of dates, manufacturer's function, and evidence of reuse. Table 4.14 offers part of this tabulation as an example. Coding of all attributes for computer-assisted analysis was unnecessary, since most attributes are of interest only for what they tell about date or function. The entire process of compressing and tabulating the field records took only one person-day (for 144 artifacts).

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### OTHER ARTIFACTS

NOTE: Take rubbing of any embossing.

01	Artifact number
02	Site number
03	Provenience number
04	Material type
05	Manufacturer's function
06	Modification/re-use
07	Manufacturer's identifying marks and labels
08	Other details (e.g., describe ceramic type)

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Figure 4.8: Recording form for artifacts other than glass and metal.

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## GLASS ARTIFACTS

NOTE: Take rubbing of any embossing.

01	Artifact number _____	10	Finish
02	Site number _____		1001 Sheared lip
03	Provenience number _____		1002 Crown
04	Artifact type		1003 Continuous thread
	0401 Bottle		1004 Single ring
	0402 Jar		1005 Double ring
	0403 Jar lid		1088 Unknown
	0404 Lantern globe or base		1099 Other (describe)
	0405 Bead	11	Closure (recovered or evident from finish)
	0406 Plate glass		1101 Screw cap
	0488 Unidentified		1102 Crown cap
	0499 Other (describe)		1103 Plug (cork or glass stopper)
05	Color		1104 Lightning stopper or cap
	0501 Clear		1188 Unknown
	0502 Dk. blue (cobalt)		1199 Other (describe)
	0503 Lt. blue (aqua)	12	Base
	0504 Dk. green (emerald)		1201 Pontil scar
	0505 Lt. green		1202 Push up
	0506 Brown		1203 Cutoff scar
	0507 Amber		1204 Valve mark
	0508 Milk glass		1205 Ring seam
	0509 "Black" (dk. green)		1288 Unknown
	0510 Purple		1299 Other (describe)
	0599 Other (describe)	13	Labeling and lettering
06	Amount of artifact recovered		1301 Embossed
	0601 1-25%		1302 Paper
	0602 26-50%		1303 Silk screen or applied color
	0603 51-75%		lettering
	0604 76-99%		1304 Paper and embossed
	0605 100%		1388 Unknown
	0688 Unknown		1399 Other (describe)
07	Fragment type	14	Manufacturer's function _____
	0701 Finish (lip)		
	0702 Neck	15	Height (16th inch) _____
	0703 Wall (body)	16	Stated volume _____
	0704 Base	17	Basal diameter(s) _____
	0705 Closure (lid or stopper)	18	Body wall thickness _____
	0706 Complete artifact	19	Alteration, re-use (including melting; describe) _____
	0707 Finish/neck		
	0708 Finish/wall		
	0709 Neck/wall	20	Aging and weathering
	0710 Wall/base		2001 Sick glass (patination)
	0788 Unidentified		2002 Sun coloring
	0799 Other (describe)		2003 None
08	Trademark or trade name (manufacturer of container or contents) _____		2088 Unknown
09	Seams		2099 Other
	0901 None (free-blown)		
	0902 Seams disappear at finish		
	0903 Seams all way to lip		
	0904 Neck & body seams misaligned		
	0988 Unidentified		
	0999 Other (describe)		

Figure 4.9: Glass artifact recording form.

# METAL ARTIFACTS

NOTE: Take rubbing of any embossing.

01	Artifact number _____	10	Opening procedure
02	Site number _____		1001 Church key
03	Provenience number _____		1002 Strip key
04	Artifact type		1003 Can opener
	0401 Can--body or entire		1004 Replaceable lid (hinge, slip, pry-out)
	0402 Can or jar lid		1005 Pull tab
	0403 Wire		1006 Knife
	0488 Unknown		1007 Punch
	0499 Other (describe)		1088 Unknown
05	Material		1099 Other (describe)
	0501 Tin	11	Manufacturing technique
	0502 Tin-plated steel		1101 Cast
	0503 Steel		1102 Forged
	0504 Lead		1103 Drawn (wire)
	0505 Cast Iron		1104 Stamped
	0506 Copper		1106 Rolled and stamped
	0507 Brass		1106 Sheet
	0508 Silver		1107 Seamless rolled (recent aluminum cans)
	0509 Aluminum		1188 Unknown
	0510 Enamelware		1199 Other (describe)
	0511 Ferrous	12	Height or Length (16ths inch for cans)
	0512 Nonferrous		_____
	0513 Cuprous		Thickness _____
	0588 Unknown		Diameter(s) _____
	0599 Other (describe)		Width _____
06	Shape		Volume _____
	0601 Cylindrical (incl. cans)	13	Can number _____
	0602 Flat	14	Original contents or function (describe)
	0603 Bar	15	_____
	0604 Wire	16	Identifying codes or labels (describe)
	0605 Unknown	17	_____
	0606 Other (describe)	18	Modification and re-use (describe)
07	Seams		_____
	0701 Lapped	19	Deterioration or corrosion
	0702 Interlocked, unsoldered	20	2001 None
	0703 Interlocked, soldered	21	2002 Some, but artifacts still whole
	0704 Seamless		2003 Artifact partly destroyed but can still be identified (coded under 04 type)
	0788 Unknown		2004 Too deteriorated to identify
	0799 Other		
08	Labels and lettering (manufac-turer of container or contents) _____		
09	Seal		
	0901 Hole-in-top, spot		
	0902 Hole-in-top, cap		
	0903 Screw cap		
	0904 Strip key		
	0905 Stamped (ends overlay body)		
	0906 Sanitary (crimped, soldered)		
	0907 Slip cover		
	0908 Pry out		
	0909 Hinged lid		
	0910 Pull tab		
	0988 Unknown		
	0999 Other (describe)		

Figure 4.10: Metal artifact recording form.



**Table 4.14: Example of Artifact Data Summary for One Feature: Glass Artifacts on Rock Pile**

<b>Artif. No.</b>	<b>Artifact Type</b>	<b>Date</b>	<b>Basis Of Date</b>	<b>Manufac. Func.</b>
036	bottle/jar fr.	post-1902	cutoff scar	U
037	glass frag.	U	-	U
038	jar frag.	post-1930	color	U
039	glass frag.	1930s	Depression glass cup or dish	
040	bottle frag.	1930s?	resemblance to pop bottle (orange) item on another dated site	
044	glass frag.	U	-	U
045	bottle frag.	1904-1909?	label	canning jar?
046	glass frag.	pre-1955	sick glass	U
047	bottle frag.	U	-	U
056	glass frag.	1930s?	Depression glass?	cup or dish
057	glass frag.	U	-	U
059	plate glass fr.	U	-	U
064	cup frag.	post-1930	milk glass	cup
065	bottle frag.	1930s?	see 040	pop bottle
066	bottle frag.	1930s?	see 040	pop bottle
067	bottle frag.	1929-1954	Owens Ill. TM	U
070	jar frag.	U	-	pickle jar?
071	bottle frag.	post-1902	cutoff scar	pop?
076	glass frag.	post-1930	milk glass	plate
078	bottle frag.	1920-64	Hazel-Atlas TM	U
080	glass frag.	U	-	lamp chimney
083	bottle frag.	post-1918	continuous thread	U
084	bottle frag.	post-1918	continuous thread	U
085	jar lid	1875-1920	lightning stopper	canning jar
090	bottle frag.	U	-	shampoo bottle?
094	jar frag.	1900-1952	Mentholatum TM	Mentholatum jar

## Ethnohistory

On the brief visit to the site before the archeological recording mentioned above, an interviewee pointed out the site's most obvious features; however, the interviewee did not cover the site systematically and try to identify every feature. Such systematic identification after the archeological recording would have been desirable, but time did not allow it.

An interview after field recording at the home of a second informant did yield more information on some features. Relevant historical documents, mainly the land records from the County, BLM State Office, and National Archives homestead case files cited throughout this report, also provided information.

The homestead case file for the Martin home-site, the historic site most thoroughly recorded archeologically during this project, was, ironically, the only case file that was incomplete.

## Time Spent

All of the recording just outlined took six person-days, excluding travel: one and one-half days for recording the general site characteristics, mapping, and photographing; one and one-half days for recording artifacts in the field; one day for redrafting the site and feature maps; one day for laboratory analysis of artifacts (analysis is of data on field forms) and tabulation of their attributes; and one day for ethnohistorical research.

## Results

### General Site Characteristics

The site is a historical period homesite that covers an area approximately 125 m east-west and 85 m north-south. It is situated in the SW/4 of the SE/4 of Section 5, T.4N. R.18W., Cibola County, New Mexico, on the rim of Santa Rita Mesa between piñon-juniper woodland and open grassland.

The nearest water sources are Moreno Spring, about half a mile southwest below the rim, and Semi-Lomesome Windmill, about three-quarters of a mile north. The soil is rocky, with chunks of the limestone that evidently makes up the underlying strata present on the surface; basalt crops out along the rim of the mesa forming the southern boundary of the site.

### Features

The site consists of the following features (Figure 4.11).

1. **Hearth:** An unprepared burned area about 2.5 m in diameter lies at the west end of the site. Artifacts scattered sparsely in the hearth and a surrounding 5-m grid square were completely recorded. Melted glass in this assemblage suggests that trash may have been burned on this spot.

2. **Post-and-wire corral:** This rectangular area outlined by widely spaced posts measures about 5.3 m by 14.8 m. The posts were evidently strung with wire. Scraps of chicken wire remain in the southeast corner. Artifacts are scattered inside the area.

3. **Hearth:** A possible prepared hearth of 1 m maximum in diameter lies in the northeast corner of the site. It consists of a cluster of six angular sandstone blocks, fire-reddened and enclosing a fill of ash and charcoal. No artifacts lie within the hearth, but recent aluminum pull-tab pop cans lie nearby. The freshness of the fill suggests that the hearth is more recent than most of the other features.

4. **Notched log enclosure:** This feature, a possible corn crib, stands at the north end of the corral. It measures 3.5 m by 2.5 m and stands two to three logs high. A wooden gate

lies on the ground east of it, but no entry is evident in the sides of the enclosure.

5. **Cabin and yard:** A dismantled house with a partly collapsed fireplace and chimney is just west of the corral (Feature 2). The fireplace and chimney consist of local limestone clasts. No foundation is definable, though a low earthen mound 5 m by 9 m extends north of the chimney. Two notched logs lying across this mound suggest that the cabin was made of wood. A rock alignment with widely spaced posts north and west of the house mound delineates a yard 5 m by 8 m. The corral fence forms the east side. Artifacts are scattered over both house mound and yard.

6. **Limestone rock pile and dump:** About 7 m southeast of (behind) the house is a pile of limestone clasts like those used in the chimney. The pile is about 5 m in diameter and stands about 0.5 m high. Bits of charcoal and ashy earth lie in and around the pile. The concentration of artifacts is relatively high. Ash from the fireplace or a stove and trash were evidently dumped here. The absence of melted glass among the plentiful glass sherds suggests that the trash was not burned. All artifacts at this feature were recorded.

7. **Series of three hearths:** Three unprepared burned areas, 2-3 m in diameter, lie just west of the house yard; they may have been spots where trash was burned. Artifacts are scattered in and around them.

8. **Scrap lumber pile:** A pile of scrap lumber lies about 25 m south of the house mound.

9. **Two notched log enclosures:** These facilities resemble Feature 4 and may have served as corn cribs for stock in the corral (Feature 10).

10. **Brush corral:** Just south of the two log enclosures is a rough oval corral of 9 m in diameter made of brush stacked between widely spaced posts. Its entry faces east and its wall incorporates a pickup truck fender. Trash is thinly scattered around.

11. **Depression:** About 15 m west of the house mound is a shallow depression about 6 m in diameter with a few artifacts inside, main-



Figure 4.11: The Martin homesite.

ly cans. Perhaps it was a privy that has been filled in to keep cattle from stepping in it. The trash could have blown in later, although no superstructure remains to confirm this suspicion.

**12. Limestone ring:** Just north of the pit is a concentration of limestone clasts about 7 m to 9 m in diameter. The rocks number fewer in the center than in the periphery. Artifacts are absent.

**13. Basalt cobble pile:** Just west of the limestone ring is another rock pile measuring 1.5 m by 5 m, this one of basalt cobbles. Artifacts are absent.

**14. Lumber pile:** Another pile of scrap lumber lies northwest of the brush corral and two log enclosures (Features 9 and 10). Perhaps it consists of material either salvaged from Feature 15, a standing log building 7 m to the north, or is left over from the construction of Feature 5.

**15. Standing log building:** This standing log building at the west end of the site consists of at least two rooms, one behind the other. The roof of the front room is still intact. It is rectangular and measures 3 m by 3.5 m by 1.75 m high. The walls are of adzed piñon logs laid horizontally and interlocking at the corners; the doorway opens northward and has a milled

lumber frame. The roof slopes ever so slightly from the center and consists of poles and lumber. Behind stretches a collapsed room (or rooms) 7.5 m long by 2 m wide, probably was of similar construction. Artifacts are thinly scattered inside and outside the structure. A complete artifact inventory was made here.

**16. Road:** A dirt track approaches the site from the north between two rows of fence posts. It curves eastward along the northern edge of the site.

**17. Dump:** A dump mainly of sanitary-seal cans with some clear glass is eroding down the mesa's rim from the southern edge of the site. The dump includes an Oklahoma license plate of 1930 and KC baking powder lids that date to 1925-1927, 1932, and post-1930.

### Artifacts

In addition to those associated with the features listed above, artifacts are scattered thinly over the entire surface of the site. Artifacts were systematically recorded at only three features: the hearth (Feature 1), rock pile (Feature 6), and standing log building (Feature 15).

A total of 144 artifacts were recorded at the three features combined. The dates of the artifacts at each feature are summarized in Table 4.15 and their functional categories on Table 4.16.

Table 4.15: Dates of Artifacts at Features on Martin Homesite (number of artifacts)

Dates	Hearth	Rock Pile	Log Building	Dates	Hearth	Rock Pile	Log Building
Prehistoric	-	4	-	Post-1840	-	1	-
1840-1921	-	1?	-	Post-1884	-	1	-
1875-1920	-	1?	-	Post-1902	1	2	-
1900-1952	-	1	-	Post-1905-7	4	6	12
1904-1909	-	1?	-	Post-1909/10	1	1	1
1907-1932	1?	-	-	Post-1915/16	-	-	2
1907-1940(?)	-	-	1	Post-1918/20	2	3	6
1920-1963/4	-	1	3	Post-1922	1	-	-
1929-1954	-	1	-	Post-1930/31	-	5	1
1930s(?)	-	4	-	Post-1962	1	-	-
1931-1935	-	-	1	Post-1970	-	-	1?
1971	-	-	1				
Pre-1932	1?	-	-				
Pre-1955	1	1	1				



**Table 4.16: Functional Types of Artifacts at Features on the Martin Homesite**

Functional Type	Hearth	Rock Pile	Log Bldg.
<b>Artifacts of production</b>	None		
<b>Food</b>			
Baking powder can	-	-	-
Vegetable/fruit can/jar (incl. canning jar)	x	x	x
Milk can/bottle	x	x	x
Lard can	-	x	x
Meat can	(recent)	x	x
Jelly can/jar	-	-	-
Syrup can/jar	-	-	-
Condiment/spice can/jar	?	-	-
Unidentifiable can/jar/bottle	x	x	x
Strip-key opened can (juice?)	-	x	x
<b>Indulgences</b>			
Coffee/tea can/jar/box	-	-	x
Pop can/bottle	-	x	x
Liquor can/bottle	-	-	-
Tobacco	x	-	x
<b>Domestic small technology</b>			
Dishes	-	x	-
Pots/pans	-	-	-
Utensils	-	-	-
Washtubs/basins/boards	-	-	-
Pails	-	-	-
<b>Household equipment</b>			
Kerosene lamp	-	x	-
Other light	-	-	-
Stove and parts	-	-	-
Water barrel	-	-	-
Furniture	x	?	-
Vases/flowerpots	x	?	-
<b>House construction/maintenance</b>			
Locks/chains/hinges	-	x	-
Large tools (rake head)	-	x	-
Small tools	-	-	-
Nails	-	x	-
Fence/wire	x	x	-
Paint can	-	-	x
Window screen	-	-	x
<b>Personal items</b>			
Patent medicine/cosmetics	x	x	x
Clothing/buttons/buckles	x	-	x
Shoes	-	x	x
Grooming aids	x	x	-
<b>Entertainment</b>			
Toys	-	-	-
Books	-	-	x
Musical instruments	-	-	-
<b>Transportation</b>			
Wagon parts/supplies	-	-	-
Auto parts/supplies	-	x	x
Horse gear	-	-	-
<b>Miscellaneous</b>			
Prehistoric potsherds	-	x	-

Table 4.15 shows that the dates of items at each feature cluster in the same interval: ca. 1905-1955. Since very little material at any feature postdates the 1930s, the major use episode of the site was probably over by 1940.

Dates based on glass color alone are not tabulated here because the color was almost invariably clear. This fact strongly indicates a post-1930 date for the artifact assemblages at all features. All three features seem to date to the period 1930-1940.

The three features differ in the ranges of dates of their artifacts. The rock pile seems to contain some earlier material (both cans and glass from before 1920) and the hearth and store definitely have a little material from the last 20 years. The recent material is scattered thinly elsewhere on the site. It probably was left by picnickers, who seem to have been particularly attracted to the standing log building. A possible explanation for the older material is harder to devise, especially since the pre-1920 dates are not sound (based on fragments of trademarks that may have been incorrectly reconstructed, for example). Possibly the early items were scattered among the rocks at the place from which the rocks were removed. A person shoveling rocks into a conveyance might pick up a few bits of cans and glass without noticing. The same process could account for the prehistoric sherds.

Artifact assemblages at the three features also differ little in functional composition (see Table 4.16). The main differences are that the log building has more indulgences represented, the rock pile, more small and large domestic items.

### Ethnohistory

The interviewee who visited the site said that it belonged to Arthur Martin and his wife, who moved there around 1932. They had no children. Land records show that Arthur Martin filed on the land in 1932. In 1937, he received Patent 1089144 to 320 acres covering the S/2 of SE/4 of Section 5 (above the rim) and the NE/4 and N/2 of SE/4 of Section 17 (below the rim), T.4N. R.18W. According to interviewees, the Martins made their living by growing corn and beans in a field just north of the site, keeping a milk cow and perhaps some other stock, and running a small store on the property. They hauled their water from Moreno Spring, where Mrs. Martin also laundered. One interviewee said that they used burros to haul the water from the spring, whereas the other said that Mrs. Martin car-

ried the water herself with a bucket in each hand. Around 1940, the Martins sold their land to Bert Cox and moved to Fence Lake, where they opened a "real" general store.

Interviewees offered information on several features. Feature 5, the dismantled house, was indeed the Martins' house. Features 4 and 9, unroofed log enclosures, may have been corn cribs. Features 6 and 10, limestone rock piles, probably consist of rocks that the Martins cleared from their field and stockpiled as building stone. One might speculate Feature 10's scooped-out center is from the removal of the highest part of the pile for building. Feature 15, the log building, was a small "store," where the Martins sold Cokes and candy, according to the memory of one interviewee. The other interviewee doubted the Martins operated the store on a regular basis, but guessed that they used it as a storehouse and sold a few things to their neighbors. The front room is too low for most grown men to stand upright, which suggests that the room was more like a stall. Feature 10, the brush corral, may have been where the Martins kept their milk cow. They did not have sheep or goats.

### Summary of Site's History

Both archeological and ethnographic data agree in dating the major use episode of the Martin homesite to the period 1930 (1932)-ca. 1940. The analysis of artifact assemblages at three features suggests later (1960s-present) sporadic visits by picnickers. Items that may antedate 1930 may not reflect an earlier use episode at the site, but rather the collection of the rocks among which these items were found from an area used earlier. If the rocks came from the cornfield to the north, the early cans and glass may have been scattered there, together with the prehistoric potsherds also found among the rocks.

A possible source of the earlier trash is the Bert Cox line camp and horse pasture within a quarter of a mile southwest of the site; indeed, the field seems to have been superimposed on the horse pasture. Bert Cox built the line shack in 1928, not much earlier than the Martins' tenure, but the site is full of obsolete styled cans (such as hole-in-top, cap). The prevailing westerly and southwesterly winds of

winter could easily have blown cans from the Cox site into the clearing.

The Martin site was the home of a farmer who also raised a few cows and sometimes sold goods to his neighbors out of a stall. Litter in and around the "store" building suggests that "indulgences" (coffee, pop, and tobacco) were consumed there and their containers discarded on the spot. The distribution of trash does not faithfully reflect the locations of activities involving the items discarded. The Martins evidently cleaned up and dumped trash in certain places, such as the rock pile, and probably burned it.

### Conclusions: Methodological Recommendations

The Martin homesite is typical of the largest, most complex historical site components that the survey recorded and that other sources indicate existed elsewhere in the SACA. Sites like the Martin homesite are the most difficult and time-consuming to record. Methods that can record these sites in a reasonable amount of time might be modified for smaller, less complex sites.

#### Survey Methodology

The general description of each site should be completed as required by the Museum of New Mexico, Laboratory of Anthropology. The work on the Martin homesite shows that large, complex sites can be mapped during survey grid-ding, and that structures and other large or complex features can be mapped individually for more detail. Sites with only a few small or simple features need not be gridded for mapping and individual features need not be mapped separately. All features on both large and small sites should be photographed, and photo points placed on the site map.

An appropriate strategy for recording artifacts is more difficult to develop. On the one hand, as the Martin homestead experiment shows, the piece-plotting and recording of significant attributes of each artifact at each feature are too time-consuming on large complex sites, although not on small ones, where a complete inventory of the artifacts at each feature and on the general surface should be made. On the other hand, features are assumed to vary



in nonrandom but unknown ways in both the dates and functions of their associated artifacts. Therefore, one cannot choose a sample of features that adequately represents all the features on the site. The compromise method proposed here for recording artifacts on large sites during survey is not perfect, but it is an improvement over the present nonstandardized "methods."

In the compromise method, observations are recorded, not on each artifact at a particular feature, but on the entire assemblage at the feature. One simply notes the presence of particular datable characteristics of the assemblage as a whole and the presence of functionally identifiable items. Rubbings and tracings of all potentially identifiable labels complete the data set. The forms used at the Martin homesite for recording the attributes of each metal or glass artifact have been adapted for recording datable attributes of all glass and metal in the assemblage on a feature (Figures 4.8 and 4.9).

Items of other materials are usually rare and can simply be listed on a separate sheet. Figure 4.12 is a checklist of common functional types that are likely to occur in artifact assemblages. Only the presence or absence of each type, not the number, need be noted. Figure 4.9 shows how the glass in the assemblage at the rock pile on the Martin homesite would be characterized according to this method (compare with individual items listed in Table 4.14).

This recording method ignores much information. For example, one can neither determine the frequencies of particular attributes nor the correlations between different parts of attributes (although the latter type of analysis is usually not necessary with mass-produced artifacts, since type descriptions of many items exist in the literature). The information is not lost as long as the artifacts on the site remain undisturbed; threatened sites will be subjected to more intensive recording during adverse-impact mitigation.

Ethnohistorical data retrieval to accompany survey can feasibly include interviewing people at their homes to identify sites by map location, archeological description, and

photographs. Site visits with interviewees are desirable to eliminate any uncertainty in identification, but often are not necessary. Detailed, feature-specific identifications on the site usually take too long to arrange and conduct during survey. Documents consulted should include the readily accessible county, state and BLM State Office land records, as well as records in state university special collections and the State Records Center and Archives in Santa Fe. Records in more distant document repositories like the National Archives usually require too much time and expense to be consulted during survey.

### **Adverse-Impact Mitigation**

A higher level of effort is warranted in recording historic sites that may be disturbed or destroyed. Instrument mapping of large sites is required. Subsurface features should be fully excavated. If this work is not feasible at all features, data recorded during survey can be used to structure the selection of a sample of features.

Each artifact at the site, or at least at the features in the sample, should be piece-plotted and the attributes listed on the forms (Figures 4.8-4.9). Attribute codes for each artifact can be entered in a line or two on a columnar-ruled blank or on a separate sheet, as was the method used on the Martin homesite. In-field attribute recording eliminates the necessity of collecting, cleaning, cataloging, and storing any artifacts.

Photographs should include the surface and subsurface appearance of each feature. Artifacts that defy description by code (auto and wagon parts, for instance) can be photographed for identification later.

Tree-ring samples (multiple, if possible) should be taken from all features with potentially datable wood. Flotation samples, especially from hearths, dumps, and storage facilities, are also worthwhile.

Ethnohistorical research at this stage should expand to include on-site interviews to identify specific features. A wider range of documents will also be worth consulting, such as the homestead case files from the National Archives.

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## **CHECKLIST OF FUNCTIONAL TYPES**

Site number \_\_\_\_\_

Feature number \_\_\_\_\_

### **Artifacts of production (describe items)**

Arms, ammunition (describe if possible)

Agricultural implements

Stockraising equipment

(list modified to suit area)

### **Food**

Baking powder can

Vegetable/fruit can/jar

Milk can/bottle

Lard can

Mean can

Jelly can/jar

Syrup can/jar

Condiment/spice can/jar

Unidentifiable can/jar/bottle

Other (describe)

### **Indulgences**

Coffee/tea can/jar/box

Pop can/bottle

Liquor can/bottle/jug

Tobacco

Other (describe)

### **Domestic small technology**

Dishes

Pots/pans

Utensils

Washboards/basins

Washboards

Pails

Other (describe)

### **Household equipment**

Kerosene lamp

Other light (specify)

Stove and parts

Water barrel

Furniture (describe)

Other (describe)

### **House construction/maintenance**

Locks/chains/hinges (describe)

Axe/shovel/large tools (describe)

Small tools (describe)

Nails

Wire

Lumber

Tar paper

Other (describe)

### **Personal items**

Patent medicine cosmetics

Clothing/buttons/buckles (describe)

Shoes

Other (describe)

### **Entertainment**

Toys

Books

Musical instruments

Other (describe)

### **Transportation**

Wagon parts/supplies (describe)

Auto parts/supplies (describe)

Horse gear (describe)

Other (describe)

### **Miscellaneous**

Describe

---

Figure 4.12. Checklist of functional types of artifacts present in assemblages at features.

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